Access DB# 01716

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Callie Shosho Examiner #: 75636 Date: 2/25/03
Art Unit: 1714 Phone Number 305-0208 Serial Number: 09/925,451
Mail Box and Bldg/Room Location: CP3-5D21 Results Format Preferred (circle): PAPER DISK E-MAIL
CP3-4D01 (mailbox)

If more than one search is submitted, please prioritize searches in order of need.

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Additives for Paints and Inks

Inventors (please provide full names): Takao Uehara, Jun Yamazaki, Kiyomasa Ohira, Shigehiro Kawahito

Earliest Priority Filing Date: 8/25/00

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Please find copolymer which is made from monomer of claim 3.

Thank You

25

****

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: EZ	NA Sequence (#)	STN
Searcher Phone #:	AA Sequence (#)	Dialog
Searcher Location:	Structure (#) (2)	Questel/Orbit
Date Searcher Picked Up:	Bibliographic (and)	Dr.Link
Date Completed: 2-25-03	Litigation	Lexis/Nexis
Searcher Prep & Review Time: 5	Fulltext	Sequence Systems
~~Clerical Prep Time:~~	Patent Family	WWW/Internet
Online Time: 65	Other	Other (specify)

PTO-1590 (8-01)

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FILE 'REGISTRY' ENTERED AT 17:05:09 ON 25 FEB 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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=> d his

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L1          7180 S UEHARA ?/AU
L2         28714 S YAMAZAKI ?/AU
L3          2120 S OHIRA ?/AU
L4           230 S KAWAHITO ?/AU
L5             1 S L1 AND L2 AND L3 AND L4
                 SEL L5 1 RN

     FILE 'REGISTRY' ENTERED AT 16:28:44 ON 25 FEB 2003
L6            13 S E1-E13
L7             6 S L6 AND N/ELS
L8             1 S 78279-10-4
L9            41 S 78279-10-4/CRN
                 E 2-PROPENOIC ACID, 2-[[[[(1-METHPROPYLIDENE)AMINO]OXY]CA
                 E 2-PROPENOIC ACID, 2-((((1-METHPROPYLIDENE)AMINO)OXY)CA

     FILE 'LREGISTRY' ENTERED AT 16:46:02 ON 25 FEB 2003
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L11            0 S L10
L12            0 S L10 FUL

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L13            0 S L10
                 E C10H16N2O4/MF
L14            0 S L10 FAM FUL
L15            4 S (L8 OR L9) AND L7
L16            2 S L7 NOT L15

     FILE 'HCAPLUS' ENTERED AT 16:52:07 ON 25 FEB 2003
L17           11 S L15
L18           32 S L9
L19            6 S L16
L20        67163 S INK?
L21       181944 S PRINT?
L22        78404 S PAINT?
L23      1324437 S (COLOR? OR COLOUR? OR PIGMENT? OR DYE? OR STAIN? OR PAI
L24            1 S L17 AND (L20 OR L21)
L25            1 S L17 AND L22
L26            2 S L17 AND (L23 OR 41/SC,SX)
L27            4 S L18 AND (L20 OR L21)
L28            2 S L18 AND L22
L29            7 S L18 AND (L23 OR 41/SC,SX)
L30            1 S L19 AND (L20 OR L21)
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L31             1 S L19 AND L22
L32             1 S L19 AND (L23 OR 41/SC,SX)
L33            11 S L24-L32
L34             9 S L17 NOT L33
L35            21 S L18 NOT (L33 OR L34)
L36             5 S L19 NOT (L33 OR L34 OR L35)

     FILE 'REGISTRY' ENTERED AT 17:05:09 ON 25 FEB 2003

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L10              STR
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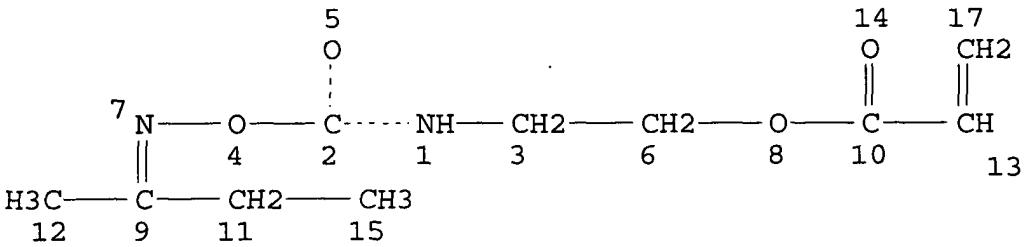


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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  16

STEREO ATTRIBUTES: NONE
L14             0 SEA FILE=REGISTRY FAM FUL L10

100.0% PROCESSED      63 ITERATIONS
SEARCH TIME: 00.00.01
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(This means no structural hits for the second reacted species in claim 3.)

0 ANSWERS

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=> file hcaplus
FILE 'HCAPLUS' ENTERED AT 17:05:51 ON 25 FEB 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> d l33 1-11 cbib abs hitstr hitind

L33  ANSWER 1 OF 11  HCAPLUS  COPYRIGHT 2003 ACS
2002:889047  Document No. 137:360429  Liquid crystal display device and
     its production method.  Asada, Tadahiro (Japan).  PCT Int. Appl. WO
     2002093241 A1 20021121, 27 pp.  DESIGNATED STATES: W:  AE, AG, AL,
     AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ,
     DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
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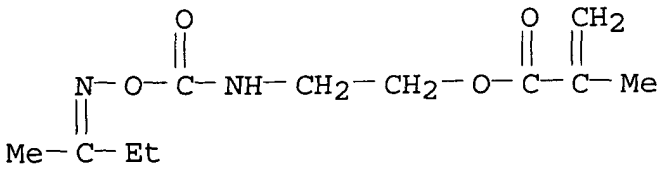
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2002-JP3964 20020419. PRIORITY: JP 2001-142894 20010514; JP 2001-151273 20010521.

AB The invention relates to a transmission and reflection **color** liq. crystal display devices exhibiting **color** by additive **color** mixing, having a non-complex structure, drivable on low voltage, displaying a high-contrast image, having a high-speed response, and capable of having a large area screen. A chiral nematic liq. crystal contg. a chiral dopant is mixed with 0.001-20 wt. % of dichroic black **dye**. The mixt. is further mixed with a prepolymer to form a transparent polymer solid body after polymn. This mixt. is interposed between two conductive substrates at least one of which is transparent. The assembly is irradiated with UV radiation or light with a short wavelength near the wavelength of UV radiation. In the dimming layer between both conductive substrates, an aggregation of vesicular liq. crystals enclosed with thin film of the transparent polymer solid material. When no voltage is applied, the **dye** mols. are distributed in the space, with the major axis being oriented randomly. Therefore the **dye** mols. absorb light. If a voltage is applied, long liq. crystal mols. are aligned vertically to the substrates, so that the **dye** mols. are also aligned. As a result, the black of the **dye** mols. are not exhibited, allowing light to be transmitted.

IT **78279-10-4**, Karenz MOI-BM
(liq. crystal display device and its prodn. method)

RN 78279-10-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



IC ICM G02F001-1334

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **Dyes**
(black, Black 1; liq. crystal display device and its prodn. method)

IT **Dyes**
(black, Black 4; liq. crystal display device and its prodn. method)

IT 818-61-1 25190-06-1, Polytetramethyleneglycol 26570-48-9, Polyethyleneglycol diacrylate 48145-04-6, Phenoxyethylacrylate **78279-10-4**, Karenz MOI-BM
(liq. crystal display device and its prodn. method)

L33 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2003 ACS
2002:673036 Document No. 137:224143 On-press-developable lithographic master plates showing good **printing** durability and background whiteness. Sakata, Itaru (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002251004 A2 20020906, 46 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-46870 20010222.

AB The plates, suited for heat-mode laser recording, comprise hydrophilic supports and image-forming layers contg. blocked polyisocyanates, heat- or radiation-sensitive .gtoreq.2-valent base precursors, and optionally photothermal converters. The base precursors may be R(SO2CH2CO2H)x [R = alkyl, aryl, (O-, S-, SO-, or SO2-bridged) alkylene or arylene, mono- or bivalent heterocyclic residue; x = 1, 2].

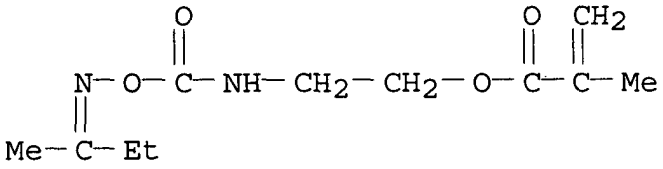
IT **216240-59-4P**, Karenz MOI-BM-styrene copolymer
(image-forming layers; on-press-developable lithog. master plates showing good **printing** durability and background whiteness)

RN 216240-59-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

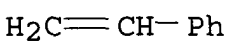
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

CRN 100-42-5
CMF C8 H8



IT **457048-26-9P 457048-27-0P 457048-28-1P**
(**printing** face; on-press-developable lithog. master

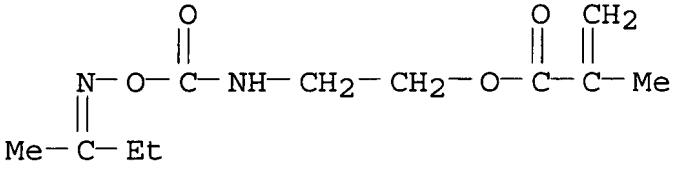
plates showing good **printing** durability and background whiteness)

RN 457048-26-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with N,N'''-1,2-ethanediylbis[guanidine] and ethenylbenzene (9CI) (CA INDEX NAME)

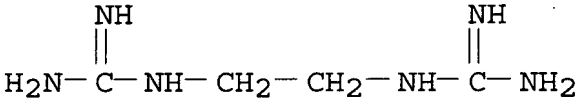
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



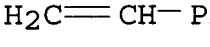
CM 2

CRN 44956-51-6
CMF C4 H12 N6



CM 3

CRN 100-42-5
CMF C8 H8

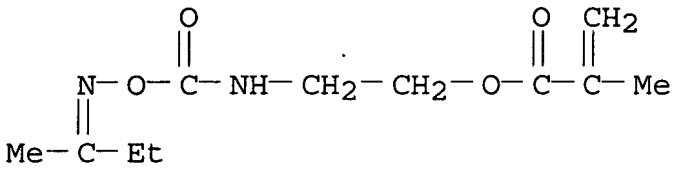


RN 457048-27-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with ethenylbenzene and N,N''',N''''''-(nitrilotri-2,1-ethanediyl)tris[guanidine] (9CI) (CA INDEX NAME)

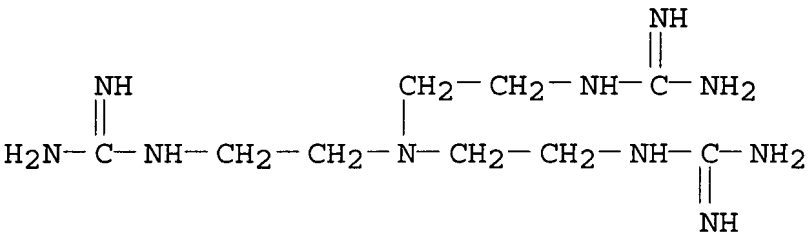
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



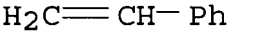
CM 2

CRN 73571-48-9
CMF C9 H24 N10



CM 3

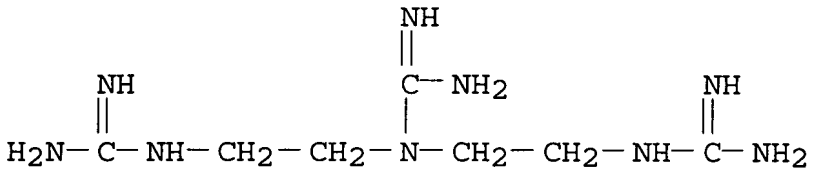
CRN 100-42-5
CMF C8 H8



RN 457048-28-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with N,N-bis[2-[(aminoiminomethyl)amino]ethyl]guanidine and ethenylbenzene (9CI) (CA INDEX NAME)

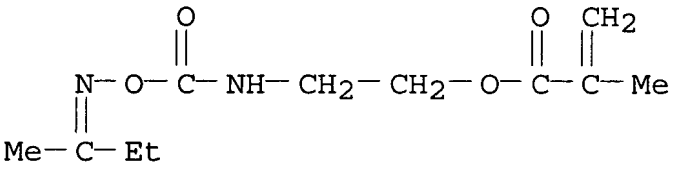
CM 1

CRN 457048-24-7
CMF C7 H19 N9



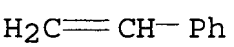
CM 2

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 3

CRN 100-42-5
CMF C8 H8



IC ICM G03F007-004
ICS G03F007-004; B41N001-14; C08G018-30; C08G018-80; G03F007-00
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST lithog master blocked polyisocyanate **printing** durability; polyamine precursor blocked polyisocyanate PS plate; presensitized lithog master polyurea **printing** face
IT Carbon black, uses
(photothermal converters; on-press-developable lithog. master plates showing good **printing** durability and background whiteness)
IT Polyureas
(polyamine-, **printing** face; on-press-developable lithog. master plates showing good **printing** durability and background whiteness)
IT Polyamines
(polyurea-, **printing** face; on-press-developable lithog. master plates showing good **printing** durability and background whiteness)

IT Lithographic plates
(presensitized; on-press-developable lithog. master plates showing good **printing** durability and background whiteness)
IT Polyureas
(**printing** face; on-press-developable lithog. master plates showing good **printing** durability and background whiteness)
IT 457048-29-2P 457048-30-5P 457048-31-6P
(base precursors; on-press-developable lithog. master plates showing good **printing** durability and background whiteness)
IT 584-84-9DP, 2,4-TDI, nitrophenol- or ketoxime-blocked
216240-59-4P, Karenz MOI-BM-styrene copolymer
(image-forming layers; on-press-developable lithog. master plates showing good **printing** durability and background whiteness)
IT 289893-03-4
(photothermal converters; on-press-developable lithog. master plates showing good **printing** durability and background whiteness)
IT 457048-22-5P 457048-23-6P 457048-25-8P **457048-26-9P**
457048-27-0P 457048-28-1P
(**printing** face; on-press-developable lithog. master plates showing good **printing** durability and background whiteness)

L33 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2003 ACS
2002:368016 Document No. 136:377583 **Color** filter, method and apparatus for its manufacture by photoelectrodeposition or photocatalytic deposition, and liquid crystal display device using it. Otsu, Shigemi; Shimizu, Takashi; Tanida, Kazutoshi; Akutsu, Eiichi (Fuji Xerox Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002139616 A2 20020517, 19 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-333386 20001031.
AB The method involves either of the following steps: (A) immersing a substrate, which comprises a light-transmitting substrate laminated with an elec. conductive matrix film and a light-transmitting semiconductor thin film successively or in reverse order, in an aq. electrodeposition soln. contg. **colorants** and soly.- or dispersibility-lowering compds. by the change of pH to contact the semiconductor thin film with the soln., and irradiating light to the selected region of the semiconductor thin film to apply a voltage between the thin film and a counter electrode for selective deposition of a **color** film, so that there is no conductive film under the **color** film or (B) immersing the same substrate as the above in an electrolytic soln. contg. **colorants** and soly.- or dispersibility-lowering compds. by the change of pH to contact the semiconductor thin film with the soln. and to elec. contact the conductive film with the soln., and irradiating light to the selected region of the semiconductor thin film for selective deposition of a **color** film, so that

there is no conductive film under the **color** film. In the above processes, the substrate may comprise a light-transmitting substrate successively laminated with TFT arrays and a light-transmitting semiconductor thin film. The app. for the above method is also claimed. The method gives **color** filters with high resoln. and edge sharpness without using electrodeposition app. and improved thermal stability.

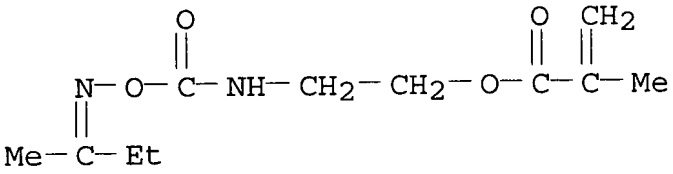
IT **390358-63-1**, Acrylic acid-2-[O-(1'-methylpropylideneamino)carboxyaminoethyl] methacrylate-styrene copolymer
(crosslinked; manuf. of **color** filter for liq. crystal display device by photoelectrodeposition or photocatalytic deposition)

RN 390358-63-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

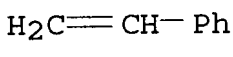
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



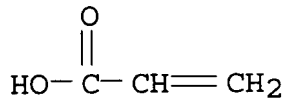
CM 2

CRN 100-42-5
CMF C8 H8



CM 3

CRN 79-10-7
CMF C3 H4 O2



IC ICM G02B005-20
ICS G02F001-1335; G09F009-00
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **color** filter photoelectrodeposition liq crystal display; photocatalytic deposition **color** filter patterning LCD
IT Aluminoborosilicate glasses
(alk. earth aluminoborosilicate, Corning 1737, substrate; manuf. of **color** filter for liq. crystal display device by photoelectrodeposition or photocatalytic deposition)
IT Liquid crystal displays
Optical filters
(manuf. of **color** filter for liq. crystal display device by photoelectrodeposition or photocatalytic deposition)
IT Coating process
(photocatalytic; manuf. of **color** filter for liq. crystal display device by photoelectrodeposition or photocatalytic deposition)
IT Electrodeposition
(photochem.; manuf. of **color** filter for liq. crystal display device by photoelectrodeposition or photocatalytic deposition)
IT Polycarbonates, uses
(substrate; manuf. of **color** filter for liq. crystal display device by photoelectrodeposition or photocatalytic deposition)
IT **390358-63-1**, Acrylic acid-2-[O-(1'-methylpropylideneamino)carboxyaminoethyl] methacrylate-styrene copolymer
(crosslinked; manuf. of **color** filter for liq. crystal display device by photoelectrodeposition or photocatalytic deposition)
IT 50926-11-9, ITO
(elec. conductive matrix film; manuf. of **color** filter for liq. crystal display device by photoelectrodeposition or photocatalytic deposition)
IT 12649-91-1
(elec. conductive matrix film; manuf. of **color** filter for liq. crystal display device by photoelectrodeposition or photocatalytic deposition)
IT 13463-67-7, Titania, processes
(manuf. of **color** filter for liq. crystal display device by photoelectrodeposition or photocatalytic deposition)
IT 25085-34-1, Acrylic acid-styrene copolymer
(manuf. of **color** filter for liq. crystal display device by photoelectrodeposition or photocatalytic deposition)

L33 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2003 ACS
2002:305926 Document No. 136:327087 Electrodeposition film formation liquid and electrodeposition film formation method. Inaba, Yoshihiro; Kobayashi, Takako; Hiraoka, Satoru; Otsu, Shigemi;

Akutsu, Eiichi (Fuji Xerox Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002121466 A2 20020423, 15 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-314226 20001013.

AB The liq. for prepn. of **color** filters comprises an acid functional group-contg. polymer, a basic compd., and H2O, wherein the neutralization rate of the polymer satisfies with a given condition. Thus, a copolymer, neutralization rate 35%, for prepn. of an electrodeposition liq. with H2O and tetramethylammonium hydroxide was made by the polymn. of styrene 420, Bu methacrylate 380, acrylic acid 260, and MOI-BM (a blocked isocyanate-contg. polymer) 350 parts.

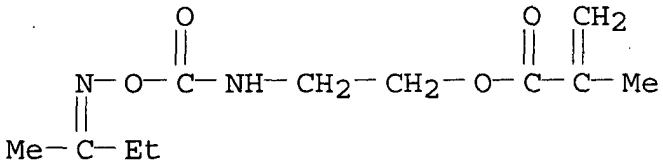
IT **414901-57-8P**, Acrylic acid-butyl methacrylate-styrene-Karenz MOI-BM copolymer **414901-59-0P**
(electrodeposition film formation liq. and electrodeposition film formation method)

RN 414901-57-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethenylbenzene, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

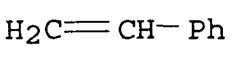
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



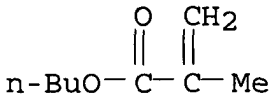
CM 2

CRN 100-42-5
CMF C8 H8



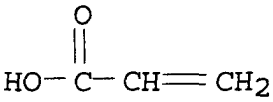
CM 3

CRN 97-88-1
CMF C8 H14 O2



CM 4

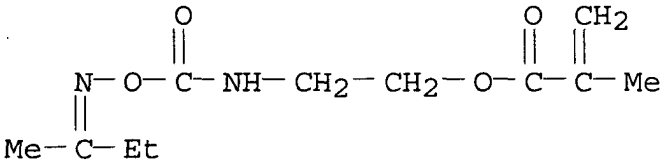
CRN 79-10-7
CMF C3 H4 O2



RN 414901-59-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

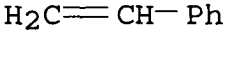
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



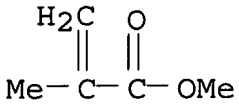
CM 2

CRN 100-42-5
CMF C8 H8



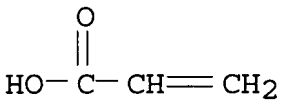
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-10-7
CMF C3 H4 O2



IC ICM C09D133-00
ICS C09D005-44; C25D009-02
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 74
ST blocked isocyanate acrylate electrodeposition coating; **color** filter polyacrylate isocyanate coating
IT **Paints**
(electrodeposited; electrodeposition film formation liq. and electrodeposition film formation method)
IT Electrodeposits
(**paints**; electrodeposition film formation liq. and electrodeposition film formation method)
IT **414901-57-8P**, Acrylic acid-butyl methacrylate-styrene-Karenz MOI-BM copolymer **414901-59-0P**
(electrodeposition film formation liq. and electrodeposition film formation method)

L33 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2003 ACS
2002:157164 Document No. 136:201903 Isocyanate-containing acrylic polymers useful for additives in coatings, **paints** and **inks** as defoaming or leveling agents. Uehara, Takao; Yamazaki, Jun; Ohira, Kiyomasa; Kawahito, Shigehiro (Kusumoto Chemicals, Ltd., Japan). Eur. Pat. Appl. EP 1182236 A1 20020227, 15 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 2001-118839 20010813. PRIORITY: JP 2000-255720 20000825.
AB The additives, particularly useful for clear coatings without melamine resins as curing agent, comprise 2-50% reactive isocyanate-contg. monomer (A) and 98-50% other monomer, wherein A is selected from 2-isocyanatoethyl methacrylate, 2-isocyanatoethyl acrylate and 3-isopropenyl-.alpha.,.alpha.-dimethylbenzyl isocyanate.

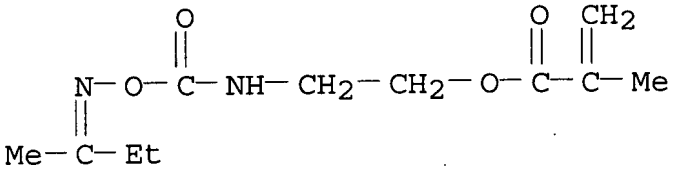
IT **401513-13-1P**, Hexadecyl methacrylate-lauryl vinyl ether-2-(O-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate copolymer
(362472-24-0P 362472-26-2P; isocyanate-contg. polyacrylate useful **for** additives **in** coatings, paints and inks as defoaming or leveling agents)

RN 401513-13-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, hexadecyl ester, polymer with 1-(ethenyloxy)dodecane and 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

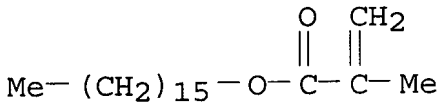
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



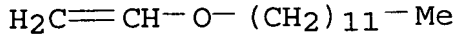
CM 2

CRN 2495-27-4
CMF C20 H38 O2



CM 3

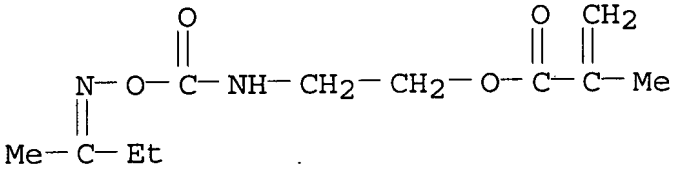
CRN 765-14-0
CMF C14 H28 O



IT **78279-10-4DP**, polymers with methacryloxypropylpolydimethylsiloxane and Bu acrylate **83729-34-4P**, 2-Ethylhexyl acrylate-2-isocyanatoethyl methacrylate copolymer **120516-25-8P**, 2-Isocyanatoethyl methacrylate-octadecyl methacrylate copolymer **401513-15-3P**, Lauryl methacrylate-2-(O-[1'-methylpropylideneamino]carboxyamino)ethyl

methacrylate copolymer **401513-18-6P**, Butyl acrylate-isobutyl vinyl ether-2-(0-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate copolymer
(isocyanate-contg. polyacrylate useful for additives in coatings, **paints** and **inks** as defoaming or leveling agents)

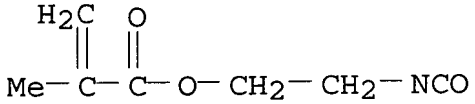
RN 78279-10-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



RN 83729-34-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-isocyanatoethyl ester, polymer with 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

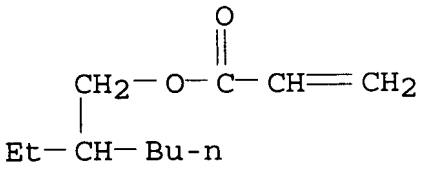
CM 1

CRN 30674-80-7
CMF C7 H9 N O3



CM 2

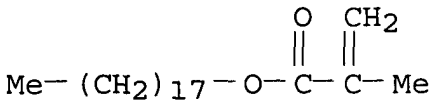
CRN 103-11-7
CMF C11 H20 O2



RN 120516-25-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-isocyanatoethyl ester, polymer with octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

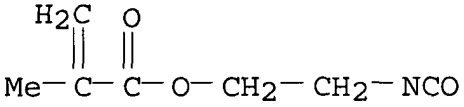
CM 1

CRN 32360-05-7
CMF C22 H42 O2



CM 2

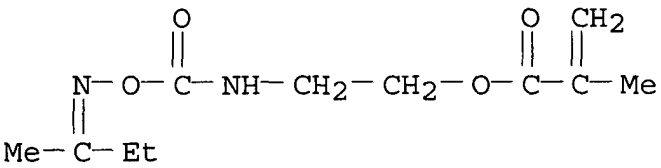
CRN 30674-80-7
CMF C7 H9 N O3



RN 401513-15-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

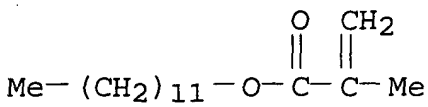
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

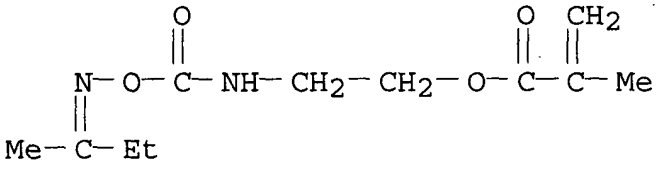
CRN 142-90-5
CMF C16 H30 O2



RN 401513-18-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with butyl 2-propenoate and 1-(ethenyloxy)-2-methylpropane (9CI) (CA INDEX NAME)

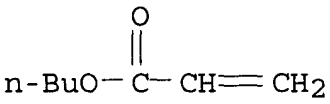
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



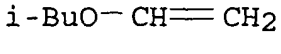
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 109-53-5
CMF C6 H12 O



IC ICM C09D007-12
ICS C08F220-34
CC 42-5 (Coatings, Inks, and Related Products)
ST isocyanate contg polyacrylate coating **paint** defoaming agent; **ink** acrylic polymer leveling agent
IT Polysiloxanes, uses

(acrylic, graft; isocyanate-contg. polyacrylate useful for additives in coatings, **paints** and **inks** as defoaming or leveling agents)

IT Transparent materials
(coatings; isocyanate-contg. polyacrylate useful for additives in coatings, **paints** and **inks** as defoaming or leveling agents)

IT Antifoaming agents
Inks
Leveling agents
Paints
(isocyanate-contg. polyacrylate useful for additives in coatings, **paints** and **inks** as defoaming or leveling agents)

IT Functional groups
(isocyanato group; isocyanate-contg. polyacrylate useful for additives in coatings, **paints** and **inks** as defoaming or leveling agents)

IT Acrylic polymers, uses
(isocyanato groups-contg.; isocyanate-contg. polyacrylate useful for additives in coatings, **paints** and **inks** as defoaming or leveling agents)

IT Coating materials
(transparent; isocyanate-contg. polyacrylate useful for additives in coatings, **paints** and **inks** as defoaming or leveling agents)

IT **401513-13-1P**, Hexadecyl methacrylate-lauryl vinyl ether-2-(O-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate copolymer
(362472-24-0P 362472-26-2P; isocyanate-contg. polyacrylate useful **for** additives **in** coatings, paints and inks as defoaming or leveling agents)

IT 693-23-2, Dodecanedioic acid 25377-73-5, Dodecenylsuccinic acid anhydride
(curing agent; isocyanate-contg. polyacrylate useful for additives in coatings, **paints** and **inks** as defoaming or leveling agents)

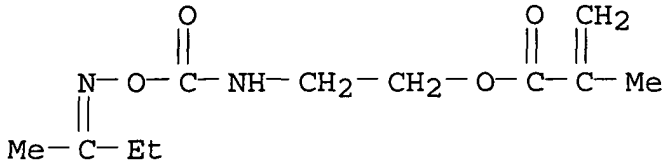
IT 141-32-2DP, Butyl acrylate, polymers with methacryloxypropylpolydimethylsiloxane and 2-(O-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate 9016-00-6DP, Polydimethylsiloxane, methacryloxypropyl derivs., polymers with Bu acrylate and 2-(O-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate 31900-57-9DP, Silanediol, dimethyl-, homopolymer, methacryloxypropyl derivs., polymers with Bu acrylate and 2-(O-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate **78279-10-4DP**, polymers with methacryloxypropylpolydimethylsiloxane and Bu acrylate **83729-34-4P**, 2-Ethylhexyl acrylate-2-isocyanatoethyl methacrylate copolymer **120516-25-8P**, 2-Isocyanatoethyl methacrylate-octadecyl methacrylate copolymer **401513-15-3P**, Lauryl methacrylate-2-(O-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate copolymer **401513-18-6P**, Butyl

acrylate-isobutyl vinyl ether-2-(0-[1'-methylpropylideneamino]carboxyamino)ethyl methacrylate copolymer
(isocyanate-contg. polyacrylate useful for additives in coatings, **paints** and **inks** as defoaming or leveling agents)
IT 70856-89-2, Finedic A-207S 272456-76-5, Finedic A-253
(isocyanate-contg. polyacrylate useful for additives in coatings, **paints** and **inks** as defoaming or leveling agents)

L33 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2003 ACS
2002:90547 Document No. 136:126689 Method of fabricating high-dielectric **color** filter, fabricating apparatus for same, **color** filter, and liquid crystal display apparatus.
Ohtsu, Shigemi; Yamaguchi, Yoshinori; Shimizu, Keishi; Akutsu, Eiichi (Fuji Xerox Co., Ltd., Japan). U.S. Pat. Appl. Publ. US 20020012856 A1 20020131, 23 pp. (English). CODEN: USXXCO.
APPLICATION: US 2001-880131 20010614. PRIORITY: JP 2000-227721 20000727; JP 2000-227722 20000727; JP 2000-349605 20001116.
AB A method of fabricating a **color** filter with a small no. of processes and at low cost is provided, for which a transparent conductive film for liq. crystal driving need not be formed, a voltage drop during liq. crystal driving is restrained, and a black matrix is easily formed; an app. for fabricating the **color** filter; the **color** filter; and a liq. crystal display app.
A **color** filter forming substrate on which a transparent conductive film and a transparent thin semiconductor film are provided on a transparent substrate in this order is brought into contact with an aq. electrodeposition liq., which contains a **colorant**, a transparent, high-dielec. material having a particle diam. of 100 nm or less, and a polymeric material that has cross-linkable groups in mols. and decreases in soly. and dispersibility for an aq. liq., depending on a change in pH, photoelectromotive force is produced by irradiating selected regions with light to form **colored** films in the selected regions, and thereby, a solvent-resistant and high-dielec. **color** filter is fabricated. Also, a **color** filter in which solvent-resistant and high-dielec. **colored** films are formed is provided.
IT **390358-63-1**, Acrylic acid-Karenz MOI-BM-styrene copolymer
(method of fabricating high-dielec. **color** filter for liq. crystal display)
RN 390358-63-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

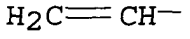
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



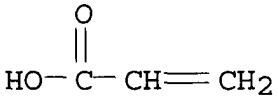
CM 2

CRN 100-42-5
CMF C8 H8



CM 3

CRN 79-10-7
CMF C3 H4 O2



IC ICM G02F001-1335
ICS G02B005-20
NCL 430007000
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST **color** filter dielec liq crystal display
IT Electrodeposition
Liquid crystal displays
Optical filters
(method of fabricating high-dielec. **color** filter for liq. crystal display)
IT 13463-67-7, Titania, uses 50926-11-9, ITO **390358-63-1**,
Acrylic acid-Karenz MOI-BM-styrene copolymer
(method of fabricating high-dielec. **color** filter for liq. crystal display)

L33 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2003 ACS
2000:705363 Document No. 133:303545 Photosensitive composition for the formation of image on **printing** plate. Watanabe, Hiroyuki; Saito, Naoto; Shimizu, Shinji; Kojima, Yasuhiko; Oe, Hiroshi (Dainippon Ink and Chemicals, Inc., Japan). Jpn. Kokai Tokkyo Koho

JP 2000275834 A2 20001006, 12 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1999-81662 19990325.

AB The photosensitive compn. comprises an IR absorber and an aq. resin having a blocked isocyanate group. This photosensitive resin compn. makes possible to write images by a near-IR laser.

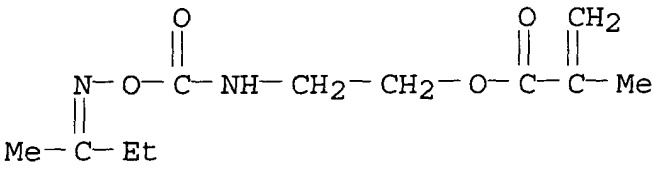
IT **300681-24-7P**, Acrylic acid-butyl methacrylate-Karenz MOI-BM-methyl methacrylate copolymer **300681-38-3P**, Butyl methacrylate-2-hydroxyethyl methacrylate-Karenz MOI-BM-methyl methacrylate-styrene copolymer
(photosensitive compn. for the formation of image on **printing** plate)

RN 300681-24-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with methyl 2-methyl-2-propenoate, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

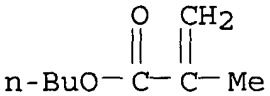
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



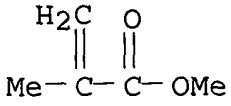
CM 2

CRN 97-88-1
CMF C8 H14 O2



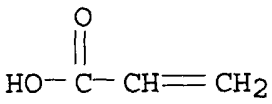
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

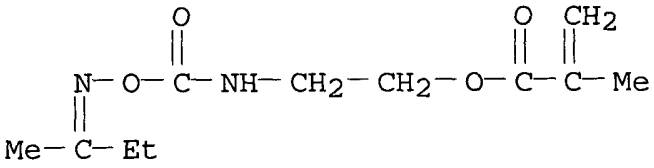
CRN 79-10-7
CMF C3 H4 O2



RN 300681-38-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

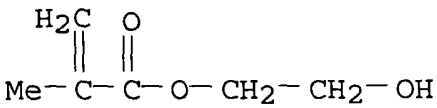
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



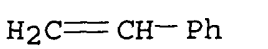
CM 2

CRN 868-77-9
CMF C6 H10 O3



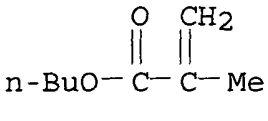
CM 3

CRN 100-42-5
CMF C8 H8



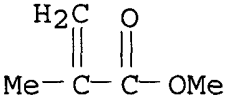
CM 4

CRN 97-88-1
CMF C8 H14 O2



CM 5

CRN 80-62-6
CMF C5 H8 O2



IC ICM G03F007-038
ICS B41N001-14; G03F007-00; G03F007-004; G03F007-32
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
ST photosensitive compn **printing** plate
IT Photoimaging materials
Printing plates
(photosensitive compn. for the formation of image on **printing** plate)
IT **300681-24-7P**, Acrylic acid-butyl methacrylate-Karenz MOI-BM-methyl methacrylate copolymer **300681-38-3P**, Butyl methacrylate-2-hydroxyethyl methacrylate-Karenz MOI-BM-methyl methacrylate-styrene copolymer
(photosensitive compn. for the formation of image on **printing** plate)

L33 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2003 ACS
1998:766532 Document No. 130:31198 Formation of images for **printing** plates. Obuchowicz, Jacek Paul; Zumsteg, Fredrick

Claus (Agfa-Gevaert Naamloze Vennootschap, Belg.). PCT Int. Appl. WO 9851496 A1 19981119, 28 pp. DESIGNATED STATES: W: JP, US; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1998-EP2832 19980508. PRIORITY: GB 1997-9404 19970510.

AB The invention provides a radiation-sensitive plate which is imageable by exposure to thermal radiation and comprises (a) a substrate, (b) an imaging layer contg. a disperse phase comprising a water-insol. heat-softenable component, a continuous phase comprising a component which is sol. or swellable in an aq. medium and a substance capable of strongly absorbing radiation and transferring the energy as heat to the disperse phase to cause at least partial coalescence of the coating, and (c) a topmost covering layer having an optical d. which is lower than that of the imaging layer at the wavelength of exposure and contains either a combination of a disperse phase and a continuous phase or a polymer resin which is sol. or dispersible in an aq. medium. A method of image formation is also disclosed. The invention overcomes the difficulties assocd. with surface overheating which are obsd. with prior art materials and provides **printing** plates showing improved press performance.

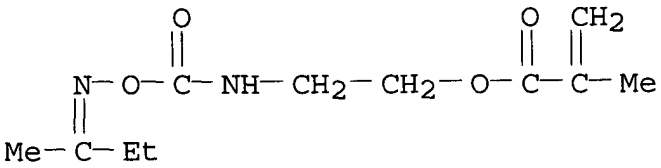
IT **216240-59-4P**
(prepn. and use in photothermog. materials for **printing** plate prepn.)

RN 216240-59-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

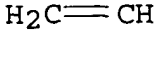
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

CRN 100-42-5
CMF C8 H8



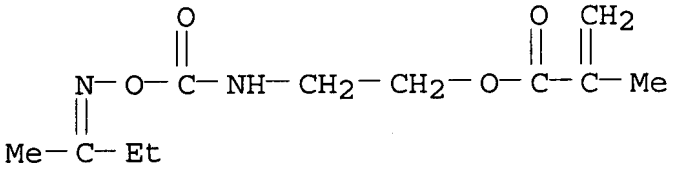
IC ICM B41C001-10
ICS B41M005-36
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST photothermog material **printing** plate
IT Carbon black, uses
(FW 2V; photothermog. materials for **printing** plate prepn. with imaging layers contg.)
IT Lithographic plates
Printing plates
(photothermog. materials with imaging layers comprising disperse and continuous phases for prepn. of)
IT Polyvinyl butyrals
(phthalates; photothermog. materials for **printing** plate prepn. with imaging layers contg.)
IT Photothermographic copying
(radiation-sensitive materials with imaging layers comprising disperse and continuous phases for **printing** plate prepn. by)
IT 88650-49-1, Acrysol I 62 144637-50-3, Carboset XL37 216383-12-9, NeoRez R 987
(photothermog. materials for **printing** plate prepn. with imaging layers contg.)
IT 78537-70-9P, N-(Isobutoxymethyl)acrylamide-styrene copolymer **216240-59-4P** 216302-59-9P, Ammonium sulfatoethyl methacrylate-glycidyl methacrylate-styrene copolymer
(prepn. and use in photothermog. materials for **printing** plate prepn.)

L33 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2003 ACS
1994:109638 Document No. 120:109638 Isocyanate group-containing resins for baking-type coatings. Noguchi, Takeshi; Inada, Tadahiro (Showa Highpolymer, Japan). Jpn. Kokai Tokkyo Koho JP 05255637 A2 19931005 Heisei, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-90308 19920316.
AB Resins [glass transition temp. (Tg) 0-110.degree.] with carbon main chain and contg. .gtoreq.0.5% (as NCO) masked NCO groups and 0.4-7.5% (as Si) hydrolyzable silyl groups in the side chain give baked coatings with excellent surface hardness, bending property, solvent resistance, weatherability, etc. Coating materials comprising the resins, **pigments**, solvents, and 0.5-5.0% (based on resins) diamines and/or diols or alcs. and/or orthoformate esters are also claimed. Thus, polymn. of MEK oxime-blocked isocyanatoethyl methacrylate (I) 16.9, Bu acrylate (II) 39.6, Me methacrylate (III) 39.6, methacryloxypropyltriethoxysilane (IV) 19.8, and maleic anhydride (V) 2.2 g in PhMe in the presence of AIBN at 80.degree., addn. of I 32.7, II 76.8, III 76.8, IV 36.6, and V 4.6 g, and completing the polymn. gave a copolymer with Tg 25.degree., forming a coating on a SPTE sheet with pencil hardness HB and good flexibility when baked at 150.degree. for 10 min.
IT **152965-83-8P**
(prepn. of, coatings, with good hardness and flexibility)

RN 152965-83-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2,5-furandione, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate and 3-(triethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

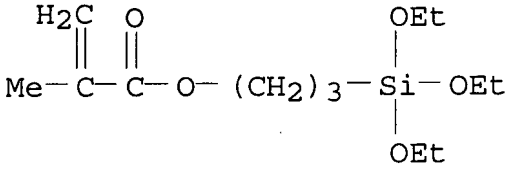
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



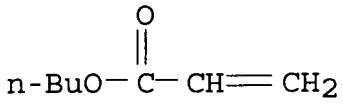
CM 2

CRN 21142-29-0
CMF C13 H26 O5 Si



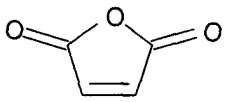
CM 3

CRN 141-32-2
CMF C7 H12 O2



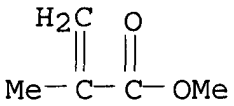
CM 4

CRN 108-31-6
CMF C4 H2 O3



CM 5

CRN 80-62-6
CMF C5 H8 O2



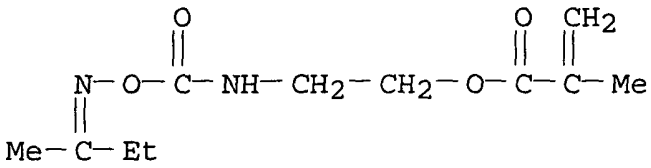
IC ICM C09D133-14
ICS C09D133-14
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 55
IT **152965-83-8P** 152965-84-9P
(prepn. of, coatings, with good hardness and flexibility)

L33 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2003 ACS
1992:492354 Document No. 117:92354 Vinyl chloride polymer plastisols for coatings. Ikeda, Takenori; Iida, Koji; Otsubo, Mitsuru; Kase, Mitsuo; Matsuyama, Akira; Ogoshi, Noboru (Dainippon Inki Kagaku Kogyo K. K., Japan). Jpn. Kokai Tokkyo Koho JP 04059849 A2 19920226 Heisei, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1990-172968 19900629.
AB The title plastisols contain copolymers of metal-chelating vinyl monomers and vinyl monomers which have .gtoreq.2 C atoms in a chain and are sol. in the plasticizers. Heating DOP 376, dimethylaminoethyl methacrylate (I) 120, Bu methacrylate (II) 280, and tert-Bu peroxy-2-ethylhexanoate 24 parts at 80.degree. gave a I-II copolymer soln. which was mixed (20 parts) with Kanevinyl PSL-10 70, Kanevinyl PCH-12 30, DOP 100, CaCO3 100, and dibasic Pb phosphite 3 parts and coated on steel to give a 0.25-mm coating with good stability, adhesion, discoloration resistance, and warm water resistance.
IT **142957-70-8**
(PVC plastisols contg., for coatings)
RN 142957-70-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with butyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

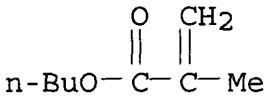
CRN 78279-10-4
CMF C11 H18 N2 O4

[redacted]



CM 2

CRN 97-88-1
CMF C8 H14 O2



IC ICM C08L027-06
ICS C08K005-10; C09D127-06
ICI C08L027-06, C08L033-06; C08L027-06, C08L025-06; C08L027-06, C08L031-04; C08L027-06, C08L035-02
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 37
IT Chelating agents
(acrylic polymers, PVC plastisols contg., for coatings with good **color**)
IT 25702-92-5, Butyl methacrylate-.beta.-hydroxyethyl methacrylate copolymer 25951-87-5, Butyl methacrylate-glycidyl methacrylate copolymer 26284-14-0, Butyl methacrylate-methacrylic acid copolymer 26658-83-3, Butyl methacrylate-(dimethylamino)ethyl methacrylate copolymer 30606-45-2, Butyl acrylate-(dimethylamino)ethyl methacrylate copolymer 112813-58-8 119970-30-8 142957-69-5 **142957-70-8** 142957-71-9
(PVC plastisols contg., for coatings)

L33 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2003 ACS
1987:158055 Document No. 106:158055 Cathodic electrocoating composition comprising **pigmented** aqueous latex binder.
Abbey, Kirk J.; Foss, David J.; Kunz, Barbara L. (SCM Corp., USA).
U.S. US 4624762 A 19861125, 8 pp. (English). CODEN: USXXAM.
APPLICATION: US 1985-723483 19850415.
AB Solvent-resistant coatings comprise thermosetting cation-active latexes [e.g. (meth)acrylate polymers] and (crosslinkable) **pigment** dispersants, and, optionally, latex- and dispersant-reactive crosslinking agents as binders. A mixt. of 49.3:7.3:0.2:8.6:32.2 Bu acrylate-2-butanone ketoxime-blocked isocyantoethyl methacrylate-dimethylaminoethyl methacrylate (I)-hydroxypropyl methacrylate-Me methacrylate copolymer latex,

11.8:36.1:7.1:26.3 I-Et acrylate-hydroxyethyl acrylate-styrene copolymer dispersant, blocked isophorone diisocyanate crosslinker (B1370) and additives was electrodeposited on steel and cured at 190.degree. for 20 min, giving a film with MEK resistance >100 double rubs.

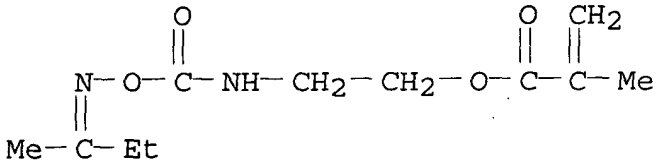
IT **107719-31-3 107860-00-4**
(electrodeposited coatings)

RN 107719-31-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, ethenylbenzene, ethyl 2-propenoate, 2-hydroxyethyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate and 1,2-propanediol mono(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

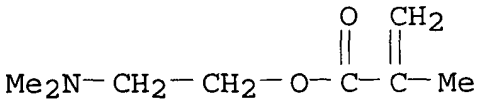
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



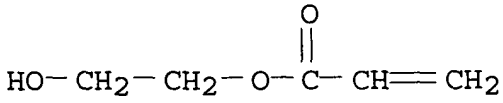
CM 2

CRN 2867-47-2
CMF C8 H15 N O2



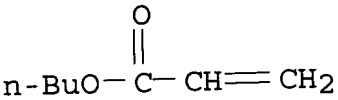
CM 3

CRN 818-61-1
CMF C5 H8 O3



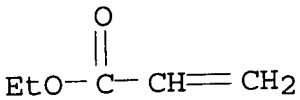
CM 4

CRN 141-32-2
CMF C7 H12 O2



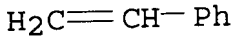
CM 5

CRN 140-88-5
CMF C5 H8 O2



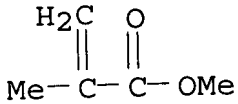
CM 6

CRN 100-42-5
CMF C8 H8



CM 7

CRN 80-62-6
CMF C5 H8 O2

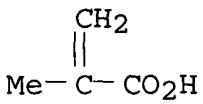


CM 8

CRN 27813-02-1
CMF C7 H12 O3
CCI IDS

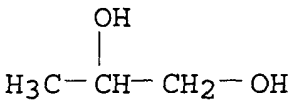
CM 9

CRN 79-41-4
CMF C4 H6 O2



CM 10

CRN 57-55-6
CMF C3 H8 O2



RN 107860-00-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, ethenylbenzene, ethyl 2-propenoate, 2-hydroxyethyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate, 1,2-propanediol mono(2-methyl-2-propenoate) and Vestanat B 1370 (9CI) (CA INDEX NAME)

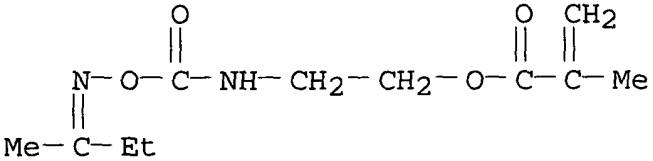
CM 1

CRN 101239-18-3
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

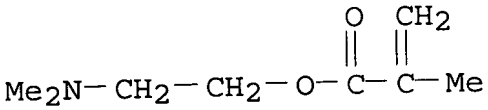
CM 2

CRN 78279-10-4
CMF C11 H18 N2 O4



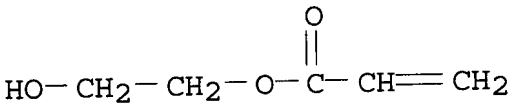
CM 3

CRN 2867-47-2
CMF C8 H15 N O2



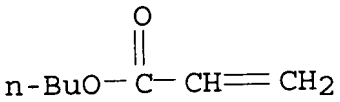
CM 4

CRN 818-61-1
CMF C5 H8 O3



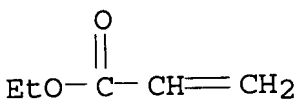
CM 5

CRN 141-32-2
CMF C7 H12 O2



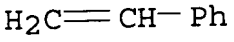
CM 6

CRN 140-88-5
CMF C5 H8 O2



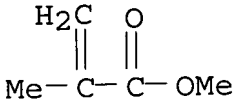
CM 7

CRN 100-42-5
CMF C8 H8



CM 8

CRN 80-62-6
CMF C5 H8 O2

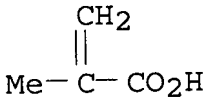


CM 9

CRN 27813-02-1
CMF C7 H12 O3
CCI IDS

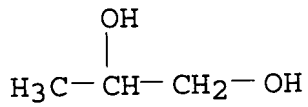
CM 10

CRN 79-41-4
CMF C4 H6 O2



CM 11

CRN 57-55-6
CMF C3 H8 O2



IC ICM C25D013-06
ICS C25D013-10
NCL 204181700

CC 42-7 (Coatings, Inks, and Related Products)
ST electrodeposition coating thermosetting solvent resistance; acrylate copolymer latex coating crosslinking; dispersant **pigment** acrylate copolymer; aq cationic electrodeposition coating
IT Coating materials
(cationic, electrodeposited, solvent-resistant, water-thinned, acrylate polymer latexes crosslinkable with acrylate polymer **pigment** dispersants)
IT 52722-05-1
(dispersing agent, for **pigments**, crosslinkable with acrylate polymer latexes)
IT **107719-31-3** 107719-32-4 **107860-00-4**
(electrodeposited coatings)

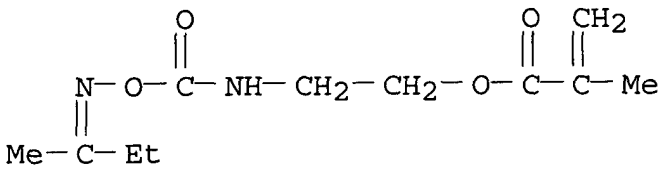
=> d l34 1-9 cbib abs hitstr hitind

L34 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2003 ACS
2002:849754 Document No. 137:339017 Perfluoroalkyl group-containing (meth)acrylate polymer water- and oil-repellent compositions. Sugimoto, Shuichiro; Maekawa, Takashige (Asahi Glass Company, Limited, Japan). PCT Int. Appl. WO 2002088272 A1 20021107, 38 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2002-JP3956 20020419. PRIORITY: JP 2001-127977 20010425.
AB Title compns. with good durability, safety and environmental conservation comprise (A) a polymer comprising polyfluoroalkyl group-contg. (meth)acrylate repeating units, C1-12 alkyl (meth)acrylate repeating units, C16-22 alkyl (meth)acrylate repeating units, and blocked isocyanate group-contg. compd. repeating units, (B) an aq. medium, and (C) a surfactant, wherein A:B:C = 100:100-500:1-10. Thus, 2-perfluoroalkylethyl acrylate 158.7, Bu methacrylate 97.2, stearyl acrylate 13.5, and 2-butanone oxime-blocked 2-isocyanatoethyl methacrylate 10.8 g were emulsion-polymd. at 60.degree. for 8 h in 389.9 g water/108 g dipropylene glycol contg. dodecyl mercaptan 0.8, Nonion E 230 10.8, Plonon 204 1.4, Surfynol 485 1.4, stearyltrimethylammonium chloride 4.3, acetic acid 1.9, and VA 061 polymn. initiator 1.2 g to give a polymer emulsion with av. particle diam. 125 nm. A cotton fabric was dipped in the resulting emulsion (solid content 1%) and dried showing good water and oil repellency initially and after laundry 5 times, no yellowing, and good feeling.
IT **78279-10-4DP**, polymers with perfluoroalkylethyl acrylates, alkyl (meth)acrylate, and optionally glycidyl methacrylate
(prepn. of perfluoroalkyl group-contg. (meth)acrylate polymer

water- and oil-repellent aq. compns. for fabrics)

RN 78279-10-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



IC ICM C09K003-18
ICS D06M015-277; D21H019-20

CC 40-9 (Textiles and Fibers)

IT 79-10-7DP, Acrylic acid, perfluoroalkylethyl esters, polymers with blocked isocyanatoethyl methacrylate, alkyl (meth)acrylates, and optionally glycidyl methacrylate 97-88-1DP, Butyl methacrylate, polymers with blocked isocyanatoethyl methacrylate, perfluoroalkylethyl acrylates, alkyl (meth)acrylates, and optionally glycidyl methacrylate 106-91-2DP, Glycidyl methacrylate, polymers with blocked isocyanatoethyl methacrylate, perfluoroalkylethyl acrylates, and alkyl (meth)acrylates 4813-57-4DP, Stearyl acrylate, polymers with blocked isocyanatoethyl methacrylate, perfluoroalkylethyl acrylates, alkyl (meth)acrylates, and optionally glycidyl methacrylate 16669-27-5DP, Behenyl methacrylate, polymers with perfluoroalkylethyl acrylate, Bu methacrylate, stearyl methacrylate, and glycidyl methacrylate 32360-05-7DP, Stearyl methacrylate, polymers with perfluoroalkylethyl acrylate, Bu methacrylate, behenyl methacrylate, and glycidyl methacrylate **78279-10-4DP**, polymers with perfluoroalkylethyl acrylates, alkyl (meth)acrylate, and optionally glycidyl methacrylate 152286-21-0DP, polymers with perfluoroalkylethyl acrylates, alkyl (meth)acrylates, and glycidyl methacrylate 217437-44-0DP, polymers with perfluoroalkylethyl acrylates, alkyl (meth)acrylates, and glycidyl methacrylate 474095-30-2DP, Blemmer VMA 70, polymers with perfluoroalkylethyl acrylates, alkyl (meth)acrylates, and glycidyl methacrylate
(prepn. of perfluoroalkyl group-contg. (meth)acrylate polymer water- and oil-repellent aq. compns. for fabrics)

L34 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2003 ACS

2002:688207 Document No. 137:218368 Water- and oil-repellent compositions containing modified acrylic polymers for fibers with laundry resistance. Sugimoto, Shuichiro; Maekawa, Takashige (Asahi Glass Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002256130 A2 20020911, 13 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-58092 20010302.

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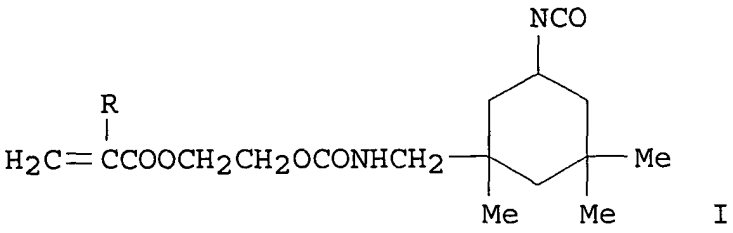


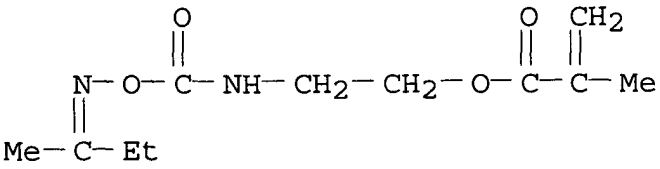
I

AB The compns. contain polymers of polyfluoroalkyl-substituted (meth)acrylates, C2-12 alkyl (meth)acrylates, and .gtoreq.1 blocked isocyanate monomers selected from NCO-blocked 2-isocyanatoethyl methacrylate and NCO-blocked monomers of I (R = H, Me). Thus, a compn. contg. [F(CF2)nCH2CH2OCOCH:CH2 (n = 6-16)] 173.4, 2-ethylhexyl methacrylate 100.1, 2-isocyanatoethyl methacrylate Me Et ketoxime 16.2, n-dodecyl mercaptan 0.5, Nonion E 230 (polyoxyethylene oleyl ether) 10.8, Pronon 204 (polyoxyethylene-polyoxypropylene block copolymer) 2.7, Surfynol 485 (bispolyoxyethylene 2,4,7,9-tetramethyl-5-decene 4,7-diether) 1.4, stearyltrimethylammonium chloride 2.1, tripropylene glycol 108.2, and water 391.3 g was emulsified at 50.degree. under stirring and polymd. at 60.degree. for 10 h in the presence of 1.2 g V 50 [2,2'-azobis(2-methylpropionamidine) dihydrochloride] to give a milky white emulsion. A piece of cotton fabric treated with 1% aq. soln. of the above emulsion showed good water and oil repellency and yellowing resistance initially and after 5-time laundry and drying at 75.degree..

IT **78279-10-4DP**, polymers with perfluoroalkyl acrylate and alkyl (meth)acrylates
(water- and oil-repellent compns. contg. modified acrylic polymers for fibers with laundry resistance)

RN 78279-10-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



IC ICM C08L033-14
ICS C08F220-34; C08K005-00; C09K003-18

CC 40-9 (Textiles and Fibers)

IT 67-51-6DP, 3,5-Dimethylpyrazole, reaction products with isocyanates, polymers with perfluoroalkyl acrylate and alkyl (meth)acrylates 80-62-6DP, Methyl methacrylate, polymers with perfluoroalkyl acrylate and isocyanate-pendent (meth)acrylates 97-88-1DP, Butyl methacrylate, polymers with perfluoroalkyl acrylate and

isocyanate-pendent (meth)acrylates 140-88-5DP, Ethyl acrylate, perfluoroalkyl derivs., polymers with blocked isocyanate-pendent (meth)acrylates and alkyl (meth)acrylates 688-84-6DP, 2-Ethylhexyl methacrylate, polymers with perfluoroalkyl acrylate and isocyanate-pendent (meth)acrylates 868-77-9DP, 2-Hydroxyethyl methacrylate, polymers with perfluoroalkyl acrylate and isocyanate-pendent (meth)acrylates 30674-80-7DP, 2-Isocyanatoethyl methacrylate, reaction products with pyrazoles, polymers with perfluoroalkyl acrylate and alkyl (meth)acrylates 32360-05-7DP, Stearyl methacrylate, polymers with perfluoroalkyl acrylate and isocyanate-pendent (meth)acrylates **78279-10-4DP**, polymers with perfluoroalkyl acrylate and alkyl (meth)acrylates 78724-20-6DP, isocyanato-blocked, polymers with perfluoroalkyl acrylate and alkyl (meth)acrylates 455885-10-6DP, polymers with perfluoroalkyl acrylate and alkyl (meth)acrylates
(water- and oil-repellent compns. contg. modified acrylic polymers for fibers with laundry resistance)

L34 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2003 ACS

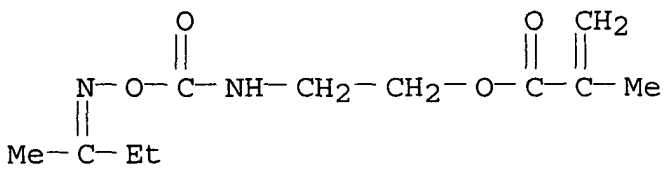
2002:566286 Document No. 137:126105 Isocyanate-grafted polyolefin adhesives suitable for extrusion lamination. Suzuta, Masayoshi; Hongo, Tadashi; Umeyama, Hiroshi (Toppan Printing Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002212238 A2 20020731, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-7526 20010116.

AB The adhesives are manufd. by grafting 0.001-10 parts monomers or reaction products contg. .gtoreq.1 blocked isocyanates and unsatd. bonds onto 100 parts olefin (co)polymers having melt index of 0.1-200 based on ASTM D 1238. Thus, (A) an adhesive comprising Me Et ketoxime-blocked methacryloyloxyethyl isocyanate-ethylene graft copolymer was coextruded with (B) LDPE and (C) ethylene-vinyl alc. copolymer to give B/A/C/A/B laminate showing peeling strength 10.3 N/15 m between A and C.

IT **78279-10-4**
(isocyanate-grafted polyolefin adhesives suitable for extrusion lamination)

RN 78279-10-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



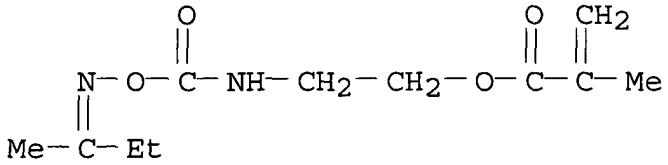
IC ICM C08F255-00
ICS C09J151-06

CC 38-3 (Plastics Fabrication and Uses)

IT 105-60-2D, .epsilon.-Caprolactam, reaction product with isocyanate **78279-10-4** 103680-05-3D, reaction products with with

caprolactam 444083-97-0 444094-82-0
(isocyanate-grafted polyolefin adhesives suitable for extrusion lamination)

L34 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2003 ACS
2000:216022 Document No. 132:252582 One-liquid, self-curable, water-repellent resins based on polysiloxanes for coatings. Matakawa, Shuichi; Abe, Toshihiko (Fuji Kasei Kogyo K. K., Japan). Jpn. Kokai Tokkyo Koho JP 2000095833 A2 20000404, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-265400 19980918.
AB The resins are manufd. by copolymg. (A) CH2:CR1SiR2R3(OSiR4R5)nR6 and/or CH2:CR7CO2(CH2)pSiR8R9(OSiR10R11)qR12 (R1, R7 = H, C1-10-hydrocarbyl; R2-6, R8-12 = C1-10-hydrocarbyl; n, q .gtoreq. 2; p = 0-10) 5-40, (B) radically polymerizable monomers contg. blocked isocyanate groups 10-50, (C) OH-contg. radically polymerizable monomers 3-50, and (D) radically polymerizable monomers having no reactivity with isocyanates or OH 10-80%. MEK oxime-blocked 2-isocyanatoethyl methacrylate (50% soln.) 126, Me methacrylate 40, Bu methacrylate 30, lauryl methacrylate 30, 2-hydroxyethyl methacrylate 34, and Silaplane FM 0721 (vinyl-terminated polysiloxane) 46 parts were polymd. in PhMe/AcOBu in the presence of Perbutyl O and the resulting soln. was mixed with dibutyltin dilaurate, applied on a tinplate, and cured at 140.degree. to give a coating, showing good soiling resistance and water repellency.
IT **78279-10-4P**
(one-liq. self-curable resins based on blocked isocyanate-contg. polysiloxanes for water-repellent coatings)
RN 78279-10-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



IC ICM C08G018-32
ICS C08F290-06
CC 42-10 (Coatings, Inks, and Related Products)
IT **78279-10-4P**
(one-liq. self-curable resins based on blocked isocyanate-contg. polysiloxanes for water-repellent coatings)

L34 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2003 ACS
1999:42546 Document No. 130:96835 Antifouling composition, method for its production and product treated therewith. Shimada, Toyomichi; Sanekata, Akane; Maekawa, Takashige (Asahi Glass Company Ltd., Japan). Eur. Pat. Appl. EP 889157 A1 19990107, 14 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,

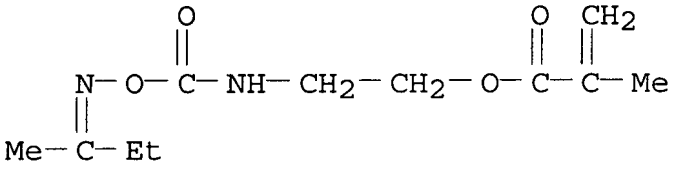
MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW.
APPLICATION: EP 1998-111993 19980629. PRIORITY: JP 1997-174728 19970630; JP 1998-19760 19980130; JP 1998-87047 19980331.

AB Antifouling compns. for fabrics comprise copolymers comprising units of a (meth)acrylate having a polyfluoroalkyl group, units of a (meth)acrylate having a polyoxyethylene group, units of a (meth)acrylate having a polyoxypropylene group, and units of a (meth)acrylate having a blocked isocyanate group. Thus, a copolymer was prepd. from perfluoroalkylethyl methacrylate 40, polyethylene glycol mono-Me ether methacrylate 30, polypropylene glycol methacrylate 28, and Me Et ketoxime-2-cyanatoethyl methacrylate adduct 2 parts.

IT **78279-10-4DP**, polymers with vinyl compds. and polyfluoroalkyl (meth)acrylates
(oilproofing and soilproofing agents for fabrics)

RN 78279-10-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



IC ICM D06M015-263
ICS D06M015-277; C08F220-24

CC 40-9 (Textiles and Fibers)

IT 96-29-7DP, Methyl ethyl ketoxime, reaction products with hydroxyethyl methacrylate and isophorone diisocyanate, polymers with vinyl compds. and polyfluoroalkyl (meth)acrylates 868-77-9DP, 2-Hydroxyethyl methacrylate, polymers with vinyl compds. and polyfluoroalkyl (meth)acrylates 868-77-9DP, reaction products with isophorone diisocyanate and Me Et ketoxime, polymers with vinyl compds. and polyfluoroalkyl (meth)acrylates 4098-71-9DP, Isophorone diisocyanate, reaction products with hydroxyethyl methacrylate and Me Et ketoxime, polymers with vinyl compds. and polyfluoroalkyl (meth)acrylates 25736-86-1DP, Polyethylene glycol methacrylate, polymers with vinyl compds. and polyfluoroalkyl (meth)acrylates 26915-72-0DP, Polyethylene glycol monomethyl ether methacrylate, polymers with vinyl compds. and polyfluoroalkyl (meth)acrylates 39420-45-6DP, Polypropylene glycol monomethacrylate, polymers with vinyl compds. and polyfluoroalkyl (meth)acrylates 78279-08-0DP, polymers with vinyl compds. and polyfluoroalkyl (meth)acrylates **78279-10-4DP**, polymers with vinyl compds. and polyfluoroalkyl (meth)acrylates 219583-11-6P 219583-16-1P
(oilproofing and soilproofing agents for fabrics)

L34 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2003 ACS

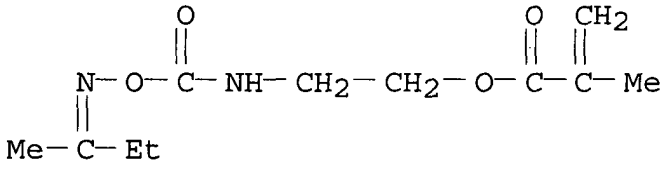
1991:431062 Document No. 115:31062 Water and oil repellents. Misaizu, Iwao; Hanada, Kazuyuki; Shibuya, Akihiko; Kuriyama, Katsumi (Dainichiseika Color and Chemicals Mfg. Co., Ltd., Japan; Ukima Color and Chemicals Mfg. Co., Ltd.). Eur. Pat. Appl. EP 383310 A2 19900822, 18 pp. DESIGNATED STATES: R: BE, DE, FR, GB, IT. (English). CODEN: EPXXDW. APPLICATION: EP 1990-102906 19900214. PRIORITY: JP 1989-33748 19890215; JP 1989-33749 19890215.

AB Title repellents comprise a copolymer of a first vinyl monomer having a perfluoroalkyl group, a second vinyl monomer having a polyorganosiloxane chain, and a third vinyl monomer having an isocyanate group or blocked isocyanate group. A copolymer was prepd. from C18F17SO2NEtC2H4O2CCH:CH2 100, Me(SiMe2O)29SiMe2(CH2)3O2CCMe:CH2 (I) 40, and 2-isocyanatoethyl methacrylate 40 parts, dild. to 0.5% in Cl3CH, and a cotton broadcloth dipped in this soln., squeezed, dried for 2 min at 80.degree. and heat treated at 160.degree. for 2 min. The finished textile had feel 5 (softer than raw textile), water repellency 90-100 after 10 washes, oil repellency 5-6 after 10 washes, water repellency after 10 dry cleaning 100, and oil repellency 5-6 after 10 dry cleanings, vs. 1, 0-50, 3, 50, and 3, resp., for a copolymer contg. Bu methacrylate instead of I.

IT **78279-10-4D**, reaction product with acetoxime, perfluoroacrylate and 2-hydroxyethyl acrylate
(oil and water repellents, for textiles)

RN 78279-10-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



IC ICM D06M015-277
ICS C08F230-08; C08F299-08

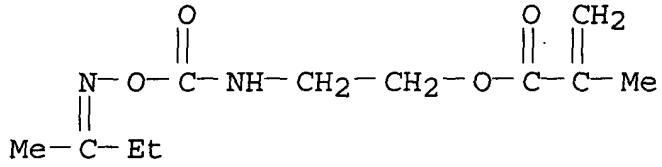
CC 40-9 (Textiles and Fibers)

IT 96-29-7D, Methyl ethyl ketoxime, reaction products with 4,4'-dicyclohexylmethane diisocyanate, 2-hydroxypropyl acrylate, perfluoroalkyl acrylates and vinyl group-contg. siloxanes 818-61-1D, reaction product with acetoxime, perfluoroacrylates and TDI 999-61-1D, reaction product with 4,4'-dicyclohexylmethane diisocyanate, Me Et betoxime, perfluroalkyl acrylates and methacryloyl group-contg. siloxanes 1996-88-9D, polymers with isocyanate group-contg. monomers and methacryloxypropyl-terminated di-Me siloxanes 5124-30-1D, reaction product with 2-hydroxypropyl acrylate, Me Et ketoxime, perfluoroalkyl acrylates and methacryloyl group-contg. siloxanes 26471-62-5D, TDI, reaction product with acetoxime, perfluoroacrylate and 2-hydroxyethyl acrylate 27905-45-9D, polymers with isocyanate group-contg. monomers and

methacryloxypropyl-terminated di-Me siloxanes **78279-10-4D**, reaction product with acetoxime, perfluoroacrylate and 2-hydroxyethyl acrylate 103223-84-3D, reaction product with 2-hydroxyethyl acrylate, perfluoracrylates and TDI 134461-94-2D, reaction product with 2-hydroxyethyl acrylate, perfluoracrylates and TDI 134695-64-0D, polymers with isocyanate group-contg. monomers and methacryloxypropyl-terminated di-Me siloxanes 134695-65-1D, reacter products with methacryloyl group-contg. siloxanes
(oil and water repellents, for textiles)

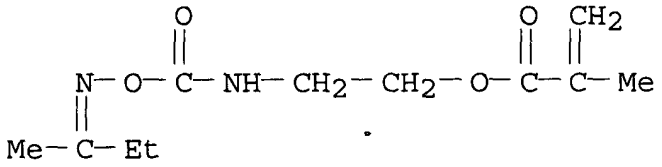
L34 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2003 ACS
1987:440358 Document No. 107:40358 Synthesis and characterization of vinyl monomers with blocked isocyanato groups. Sadoun, Tahar; Clouet, Gilbert; Brossas, Jean (Inst. Charles Sadron, Strasbourg, 67083, Fr.). Makromolekulare Chemie, 188(6), 1367-73 (English) 1987. CODEN: MACEAK. ISSN: 0025-116X.
AB Vinyl monomers contg. blocked isocyanato groups were prepd. in 1 step, by blocking the isocyanato group of 2-isocyanatoethyl methacrylate with phenol, propanone oxime, butanone oxime, benzophenone oxime or .epsilon.-caprolactam, or in 2 steps, by blocking one of the 2 isocyanato groups of 4-methyl-1,3-phenylenediisocyanate with phenol or .epsilon.-caprolactam and the 2nd group with 2-hydroxyethyl methacrylate. The 1H NMR and IR spectra of these monomers were discussed.
IT **109354-65-6P**
(prepn. and characterization of)
RN 109354-65-6 HCAPLUS
CC 35-2 (Chemistry of Synthetic High Polymers)
IT 31710-42-6P 78279-08-0P 89819-91-0P 107663-38-7P
109354-63-4P 109354-64-5P **109354-65-6P** 109354-66-7P
109354-67-8P
(prepn. and characterization of)

L34 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2003 ACS
1984:592568 Document No. 101:192568 Preparation, polymerization, and evaluation of blocked isocyanatoethyl methacrylate. Fravel, Harold G., Jr.; Regulski, Thomas W.; Thomas, Mary R. (Dow Chem. U.S.A., Midland, MI, 48640, USA). Industrial & Engineering Chemistry Product Research and Development, 23(4), 586-90 (English) 1984. CODEN: IEPRA6. ISSN: 0196-4321.
AB Isocyanatoethyl methacrylate was blocked with 20 compds. (alcs., phenols, lactams, oximes, N-hydroxyimides, heterocyclic N compds.) and the adducts were polymd. with Me methacrylate and Et acrylate. The polymers were characterized and their deblocking temps. were detd. The prepn. and polymn. of the adducts and their use (e.g., as latent crosslinking agents in systems contg. active H) are discussed.
IT **78279-10-4P**
(prepn. of)
RN 78279-10-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 37
IT 24499-73-8P 60799-41-9P 78279-08-0P **78279-10-4P**
86166-85-0P 89743-56-6P 89743-58-8P 89743-61-3P 89743-64-6P
89743-66-8P 89761-49-9P 89761-51-3P 89761-53-5P 89761-55-7P
89770-84-3P 89777-74-2P 89819-91-0P 89819-92-1P 89819-93-2P
89819-94-3P
(prepn. of)

L34 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2003 ACS
1984:157008 Document No. 100:157008 Isocyanatoethyl methacrylate. II: The blocked isocyanate derivatives, preparation and deblocking. Regulski, T.; Thomas, M. R. (Cent. Res.-Polym. Res., Dow Chem. Co., Midland, MI, 48640, USA). Organic Coatings and Applied Polymer Science Proceedings, 48, 998-1002 (English) 1983. CODEN: OCAPDE. ISSN: 0732-7528.
AB Over 20 derivs. of isocyanatoethyl methacrylate (I) [30674-80-7] were prepd. by blocking I with alcs., phenols, lactams, oximes, N-hydroxyimides, imidazole, and ethylimidazoline. The toxicity of I was decreased by blocking the isocyanate group.
IT **78279-10-4P**
(prepn. and toxicity of)
RN 78279-10-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



CC 35-2 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 23
IT 78279-08-0P **78279-10-4P** 89770-84-3P
(prepn. and toxicity of)

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L35 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2003 ACS

2003:69024 Document No. 138:123818 Oil- and water-repellent treatment for textile and method of treatment. Sawada, Hideo; Maekawa, Takashige (Asahi Glass Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2003027374 A2 20030129, 11 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-214842 20010716.

AB The treatment contain polymers having polyfluoroalkyl or polyfluorocycloalkyl terminal groups and derived from blocked isocyanate monomers and monomers having OH groups. Thus, mixing Karenz MOI-BM (MEK oxime-blocked isocyanatoethyl acrylate) 1.2 with 2-hydroxyethyl acrylate 0.58, AK 225 (mixed solvent) 20.0 and a soln. of 1.8 g di(perfluoroheptanoyl) peroxide in AK 225, 20 g at 45.degree. for 10 h gave a repellent treatment.

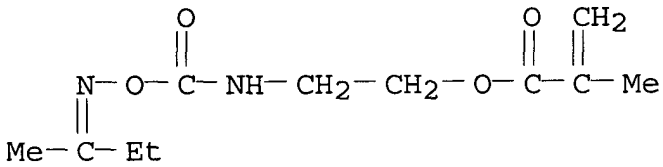
IT **489466-53-7DP**, reaction products with perfluoro compds.
489466-54-8DP, reaction products with perfluoro compds.
(oil- and water-repellent treatment for textile and method of treatment)

RN 489466-53-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with 2-hydroxyethyl 2-propenoate (9CI) (CA INDEX NAME)

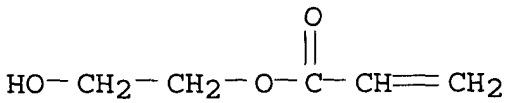
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

CRN 818-61-1
CMF C5 H8 O3

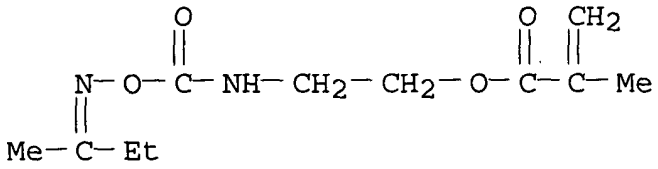


RN 489466-54-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with 2-hydroxybutyl 2-propenoate (9CI) (CA INDEX NAME)

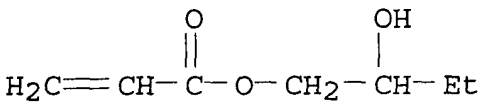
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

CRN 2421-27-4
CMF C7 H12 O3



IC ICM D06M015-256
ICS C08G018-80; C08K005-00; C08L075-04; C09K003-18; D06M015-576
CC 40-9 (Textiles and Fibers)
IT 42514-14-7DP, Di(perfluoroheptanoyl) peroxide, reaction products with hydroxy group- and blocked isocyanate group-contg. polymers
489466-53-7DP, reaction products with perfluoro compds.
489466-54-8DP, reaction products with perfluoro compds.
491613-89-9DP, reaction products with perfluoro compds.
(oil- and water-repellent treatment for textile and method of treatment)

L35 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2003 ACS
2002:977911 Document No. 138:57578 Reactive oligomers, compositions, and application of crosslinkable oligomers onto a substrate. Heilmann, Steven M.; Gaddam, Babu N.; Abuelyaman, Ahmed S.; Fansler, Duane D.; Jones, Todd D.; Kavanagh, Maureen A.; Lewandowski, Kevin M.; Wendland, Michael S. (3M Innovative Properties Company, USA). PCT Int. Appl. WO 2002102909 A1 20021227, 53 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US10447 20020403. PRIORITY: US 2001-884173 20010619.

AB The coating compns. are prepd. from a first oligomer contg. reactive functional groups capable of reaction at effective rates (at normal processing temps.) with a co-reactive second component possessing functionality that is complementary to that of the first oligomer. The compns. may be used as coatings, including hard surface coatings, clear coatings, powder coatings and pattern coatings, adhesives, including pressure sensitive adhesives and not melt adhesives, sealants, optical coatings, blown microfibers (BMF), high refractive index optical materials, barrier films, in microreplication, low adhesion backsizes (LABs), and release coatings.

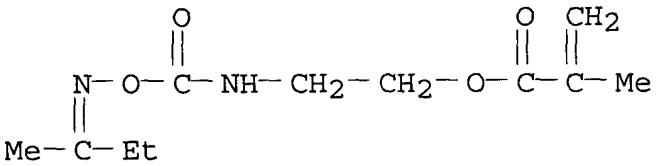
IT **479401-22-4P 479401-23-5P**
(melt-processable crosslinkable oligomers as adhesives and coatings)

RN 479401-22-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with isooctyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

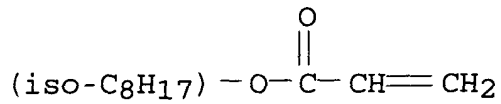
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

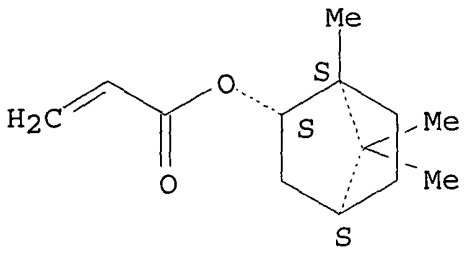
CRN 29590-42-9
CMF C11 H20 O2
CCI IDS



CM 3

CRN 5888-33-5
CMF C13 H20 O2

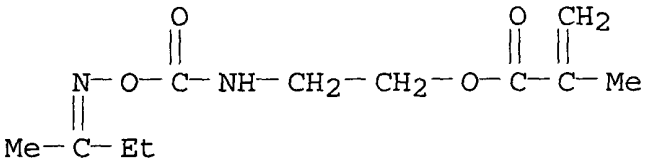
Relative stereochemistry.



RN 479401-23-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with isooctyl 2-propenoate, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

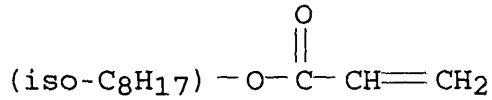
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

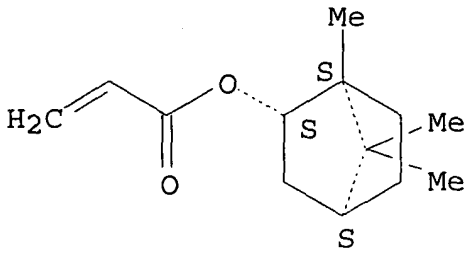
CRN 29590-42-9
CMF C11 H20 O2
CCI IDS



CM 3

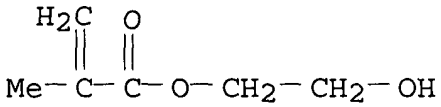
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



CM 4

CRN 868-77-9
CMF C6 H10 O3



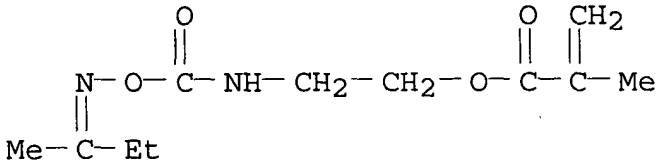
IC ICM C09D201-08
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 35
IT 479401-18-8P 479401-21-3P **479401-22-4P**
479401-23-5P 479401-25-7P 479401-26-8P 479401-29-1P
(melt-processable crosslinkable oligomers as adhesives and coatings)

L35 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2003 ACS
2002:955669 Document No. 138:47226 Electrophotographic toner showing excellent fixability and durability and its manufacture by UV photopolymerization. Shibai, Yasuhiro; Ariyoshi, Satoru; Akazawa, Yoshiaki (Sharp Corp., Japan). Jpn. Kokai Tokkyo Koho JP 2002365844 A2 20021218, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-177366 20010612.
AB The title electrophotog. toner includes a photopolymd. binder resin contg. at least carboxyl and epoxy groups or blocked isocyanate and hydroxy groups. The above binder resin contains .ltoreq.20 % of THF-insol. components and the THF-insol. components increase to .gtoreq.50 % after heating at 150.degree. for 1 min. The toner has a specified particle size distribution and a sphericity of 0.9-1. The small toner with a sharp particle size distribution is easily manufd.
IT **478920-72-8P**, Methyl methacrylate-styrene-isobornyl acrylate-butyl acrylate-4-hydroxybutyl acrylate-methylethylketoxime-modified 2-methacryloyloxyethyl isocyanate copolymer
(UV photopolymn. manuf. of electrophotog. toner binder resin showing excellent fixability and durability)
RN 478920-72-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 4-hydroxybutyl 2-propenoate, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

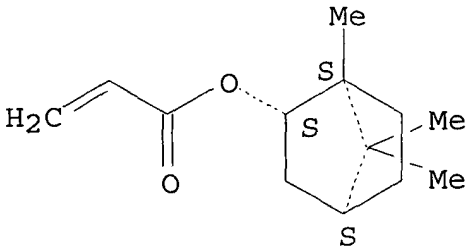
CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

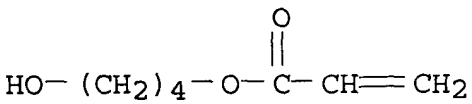
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



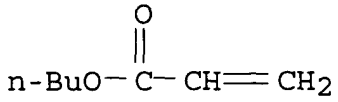
CM 3

CRN 2478-10-6
CMF C7 H12 O3



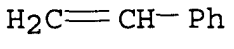
CM 4

CRN 141-32-2
CMF C7 H12 O2



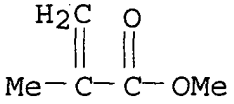
CM 5

CRN 100-42-5
CMF C8 H8



CM 6

CRN 80-62-6
CMF C5 H8 O2



IC ICM G03G009-087
ICS C08F002-00; G03G009-08
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 478920-70-6P, Acrylic acid-butyl acrylate-glycidyl methacrylate-isobornyl methacrylate-methyl methacrylate copolymer 478920-71-7P, Acrylic acid-butyl acrylate-ethylene glycol dimethacrylate-glycidyl methacrylate-isobornyl methacrylate copolymer **478920-72-8P**, Methyl methacrylate-styrene-isobornyl acrylate-butyl acrylate-4-hydroxybutyl acrylate-methylethylketoxime-modified 2-methacryloyloxyethyl isocyanate copolymer
(UV photopolymn. manuf. of electrophotog. toner binder resin showing excellent fixability and durability)

L35 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2003 ACS
2002:900701 Document No. 137:389238 Organic-inorganic composite fillers for dental composite resin materials. Yamakawa, Junichiro; Kazama, Hideki; Sato, Takeshi (Tokuyama Corp., Japan; Tokuyama Dental Corp.). Jpn. Kokai Tokkyo Koho JP 2002338422 A2 20021127, 11

pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-153839 20010523.

AB The invention relates to an org.-inorg. composite filler for dental composite resin material having improved handling property, mech. strength, and lubricating property, wherein the org.-inorg. composite filler is obtained by polymg. a mixt. contg. inorg. filler, reactive radical polymerizable monomer, and radical polymn. initiator, milling the polymd. original filler, and reacting the milled original filler with a reactive polymerizable monomer for having the radical polymerizable groups on the surface of the filler. A mixt. paste contg. 2-hydroxyethyl methacrylate, 2,2-bis(4-methacryloyloxypolyethoxyphenyl)propane, triethylene glycol dimethacrylate, azobisisobutyronitrile, and .gamma.-methacryloyloxypropyltrimethoxysilane-treated spherical silica-zirconia particle was polymd., and milled to obtain a reactive group-contg. original filler particle. The original filler particle in toluene, was mixed with 2-isocyanatoethyl methacrylate and dibutyltin dilaurate, and reacted to obtain an org.-inorg. composite filler.

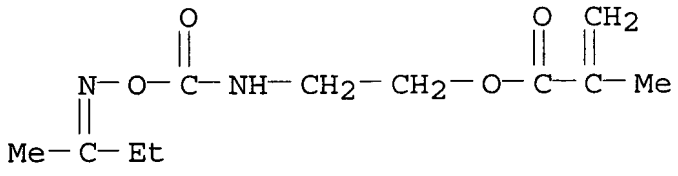
IT **476198-57-9P 476198-58-0P**
(org.-inorg. composite fillers for dental composite resin materials)

RN 476198-57-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester, polymer with 2-aminoethyl 2-methyl-2-propenoate, .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] and 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

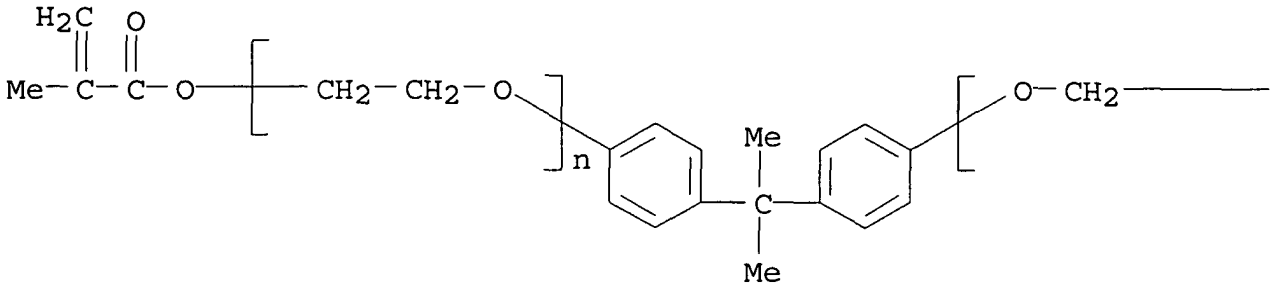
CRN 78279-10-4
CMF C11 H18 N2 O4



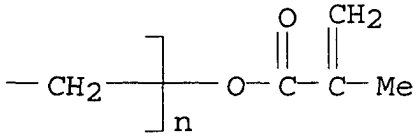
CM 2

CRN 41637-38-1
CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4
CCI PMS

PAGE 1-A

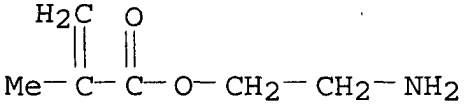


PAGE 1-B



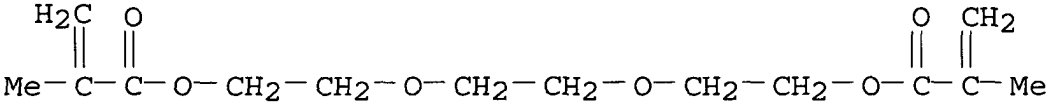
CM 3

CRN 7659-36-1
CMF C6 H11 N O2



CM 4

CRN 109-16-0
CMF C14 H22 O6

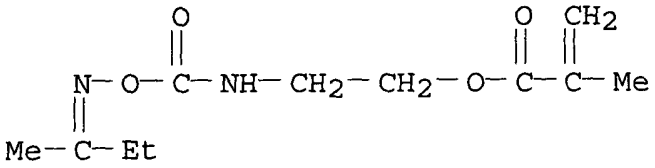


RN 476198-58-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester, polymer with 2-mercaptoethyl 2-methyl-2-propenoate,

.alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] and 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

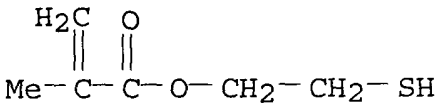
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

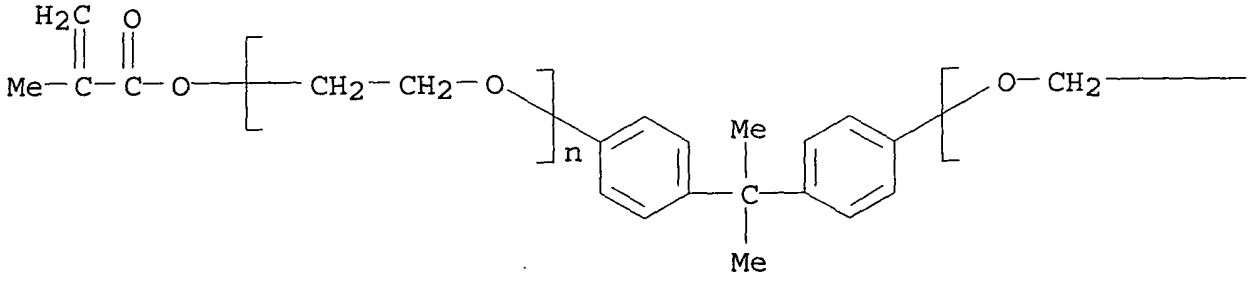
CRN 44836-12-6
CMF C6 H10 O2 S



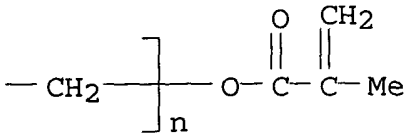
CM 3

CRN 41637-38-1
CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4
CCI PMS

PAGE 1-A

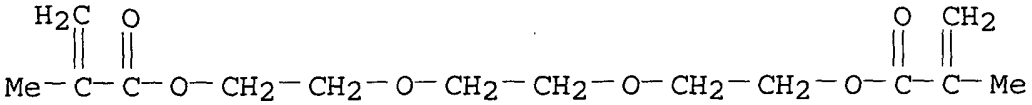


PAGE 1-B



CM 4

CRN 109-16-0
CMF C14 H22 O6



IC ICM A61K006-08
ICS C08F290-04
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 38
IT 476198-52-4P 476198-53-5P 476198-54-6P 476198-56-8P
476198-57-9P 476198-58-0P 476198-59-1P
476198-60-4P
(org.-inorg. composite fillers for dental composite resin materials)

L35 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2003 ACS
2002:864397 Document No. 137:354345 High-durability, low-yellowing repellent copolymer for treating textiles. Franchina, Justine Gabrielle (E.I. Du Pont de Nemours and Company, USA). U.S. US 6479605 B1 20021112, 8 pp., Cont. of U.S. Ser. No. 855,395, abandoned. (English). CODEN: USXXAM. APPLICATION: US 2002-91004 20020304. PRIORITY: US 2001-855395 20010515.
AB A copolymer comprises monomers copolymd. (a) .apprx.40-75% monomer RfCH2CH2OC(O)C(R):CH2, (b) .apprx.15-55% monomer R2OC(O)C(R):CH2, (c) 1.5-5% monomer HOCH2CH2OC(O)C(R):CH2, (d) 1.5-5% H(OCH2CH2)mOC(O)C(R):CH2, (e) 1-3% HOCH2NHC(O)C(R):CH2, (f) 0-9.8% vinylidene chloride, vinyl acetate, or a mixt., (g) 0-2% blocked isocyanate, where Rf is a straight or branched-chain perfluoroalkyl group of 2-20 C atoms, each R = H or Me; R2 = C2-18-alkyl; and m = 2-10. A copolymer was prepd. from 60 g CF3CF2(CF2)xC2H4OC(O)C(H):CH2 (x = 6, 8, 10, 12, 14, 16, and 18 in amts. .apprx.3%, 50%, 31%, 10%, 3%, 2% and 1%), 60 g stearyl methacrylate, 2.7 g 2-hydroxyethyl methacrylate, 2.7 g poly(oxyethylene) methacrylate, 2.7 g N-methylolacrylamide, and 10 g vinylidene chloride (I). Polyester fabric coated with the above

copolymer latex had oil repellency (AATCC 118, decane) 6, water repellency (60:40 iso-PrOH/H2O) 8, and cotton yellowing (DuPont method) 1 initially and 5 after cure, which is lower without I.

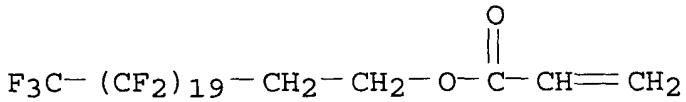
IT **474800-79-8P**
(finish; high-durability, low-yellowing repellent for textiles)

RN 474800-79-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with heneicosafluorododecyl 2-propenoate, hentetracontafluorodocosyl 2-propenoate, heptadecafluorodecyl 2-propenoate, heptatriacontafluoroeicosyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl), 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate, nonacosafluorohexadecyl 2-propenoate, octadecyl 2-methyl-2-propenoate, pentacosafluorotetradecyl 2-propenoate and tritriacontafluorooctadecyl 2-propenoate (9CI) (CA INDEX NAME)

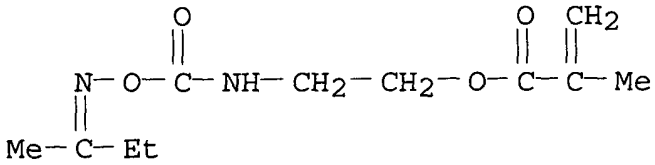
CM 1

CRN 474800-75-4
CMF C25 H7 F41 O2



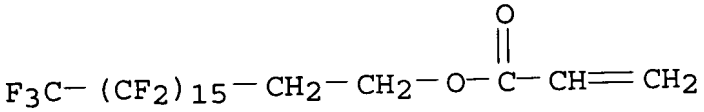
CM 2

CRN 78279-10-4
CMF C11 H18 N2 O4



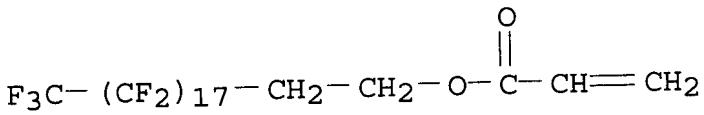
CM 3

CRN 65150-93-8
CMF C21 H7 F33 O2



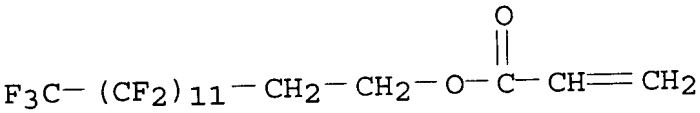
CM 4

CRN 65104-64-5
CMF C23 H7 F37 O2



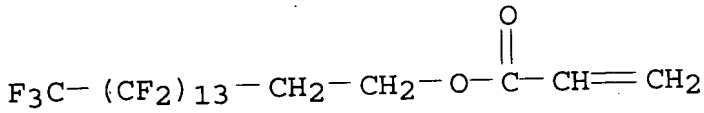
CM 5

CRN 34395-24-9
CMF C17 H7 F25 O2



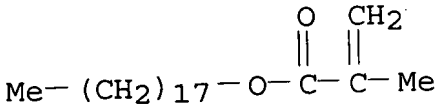
CM 6

CRN 34362-49-7
CMF C19 H7 F29 O2



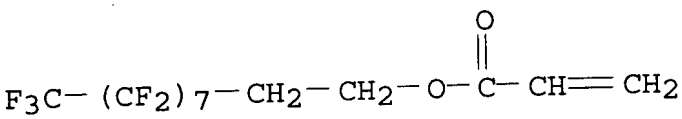
CM 7

CRN 32360-05-7
CMF C22 H42 O2



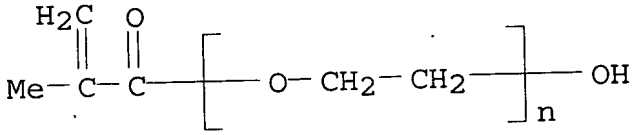
CM 8

CRN 27905-45-9
CMF C13 H7 F17 O2



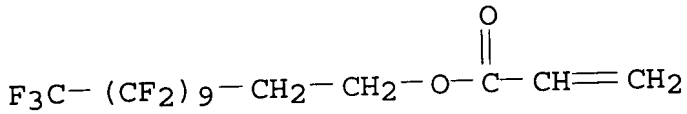
CM 9

CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



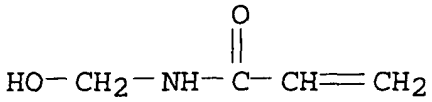
CM 10

CRN 17741-60-5
CMF C15 H7 F21 O2



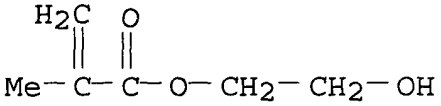
CM 11

CRN 924-42-5
CMF C4 H7 N O2



CM 12

CRN 868-77-9
CMF C6 H10 O3



IC ICM C08F118-00
NCL 526245000
CC 40-9 (Textiles and Fibers)
Section cross-reference(s): 37
IT 474800-76-5P 474800-77-6P 474800-78-7P **474800-79-8P**
(finish; high-durability, low-yellowing repellent for textiles)

L35 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2003 ACS
2002:581776 Document No. 137:201683 Synthesis and properties of fluoroalkyl end-capped cooligomers containing histamine segments. Sawada, Hideo; Ikeno, Koji; Kawase, Tokuzo (Dep. Mater. Chem. Eng., Nara Natl. Cell. Technol., Yamatokoriyama, 639-1080, Japan). Material Technology (Tokyo, Japan), 20(3), 122-129 (Japanese) 2002. CODEN: MTECFQ. Publisher: Zairyo Gijutsu Kenkyu Kyokai.
AB Fluoroalkyl end-capped cooligomers-bound histamine segments were prepd. by the reactions of the corresponding isocyanatoethyl methacrylate 2-butanone oxime adduct-N,N-dimethylacrylamide cooligomers with histamine. These fluoroakylated cooligomers-bound histamine segments thus obtained were easily sol. in water and common org. solvents except for hexane. Addnl., these fluorinated cooligomers were able to reduce the surface tension of water effectively around to 20 mN/m levels with a clear break point resembling a CMC. This finding suggests that these cooligomers can form the mol. aggregates in aq. solns. In fact, fluorescence intensity of ethidium bromide (Etd-Br) was found to increase drastically with increasing amts. of fluoroalkyl end-capped cooligomers, esp., the longest fluoroalkyl end-capped cooligomer. Thus, it is suggested that this fluorinated cooligomer should form the self-assembled mol. aggregates in aq. solns., and this mol. aggregate could interact strongly with Etd-Br as a guest mol. to increase the fluorescence intensity. Furthermore, hydrolysis of p-nitrophenyl propionate (PNP) was investigated in the presence of fluoroalkyl end-capped cooligomers contg. histamine segments in aq.

buffer solns. (pH 4.0, 7.4 and 9.0) at 30.degree.. A large rate enhancement is obsd. in the presence of RF-(IEM-HIS)x-(DMAA)y-RF [RF = CF(CF3)OCF2CF(CF3)OC3F7] for the hydrolysis of PNP at pH 9.0 as compared with the reaction catalyzed by the corresponding non-fluorinated cooligomer. PNP is believed to interact strongly as a guest mol. with the cooligomer-bound anionic imidazole units within the self-assembled fluorinated aggregates to enhance the hydrolysis rate. In this way, it is expected that our present fluoroakylated cooligomers can provide the environment of new fluorinated mol. aggregates in various org. reactions.

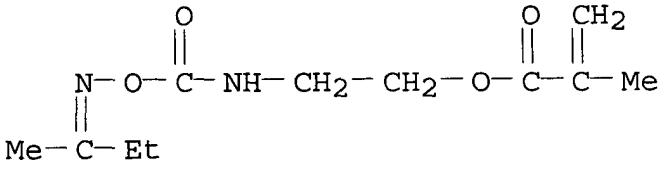
IT **294623-58-8DP**, fluoroalkyl-terminated, reaction products with histamine
(synthesis and properties of fluoroalkyl end-capped cooligomers contg. histamine segments)

RN 294623-58-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

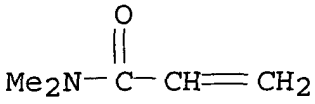
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

CRN 2680-03-7
CMF C5 H9 N O



CC 35-8 (Chemistry of Synthetic High Polymers)

IT 51-45-6DP, Histamine, reaction products with fluoroalkyl-terminated acrylic oligomer **294623-58-8DP**, fluoroalkyl-terminated, reaction products with histamine
(synthesis and properties of fluoroalkyl end-capped cooligomers contg. histamine segments)

L35 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2003 ACS

2002:549527 Document No. 137:263654 End-capped fluoroalkyl-functional silanes. Part I: Modification of glass. Kawase, Tokuzo; Sawada, Hideo (Faculty of Human Life Science, Osaka City University, Osaka, 558-8585, Japan). Journal of Adhesion Science and Technology, 16(8), 1103-1120 (English) 2002. CODEN: JATEE8. ISSN: 0169-4243. Publisher: VSP BV.

AB The successful synthesis of novel oligomeric silanes having end-capped fluoroalkyl groups was summarized. Glass surface was effectively modified by these oligomeric silanes. In particular, oligomeric silanes were more reactive and effective in the surface fluoroalkylation than monomeric silanes. From contact angle measurements, surface free energies were reduced to 15-20 and 1-3 mJ/m2 for the dispersive and the polar components, resp., and the surfaces were shown to be both highly water- and oil-repellent. Modified glass surface was analyzed using XPS. A linear correlation was obsd. between the dispersive component of surface free energy .gamma.dS and the area ratio of the F1s peak to the Si2p peak. The structure of the siloxane layer on the modified glass surface is discussed in terms of a network interphase model.

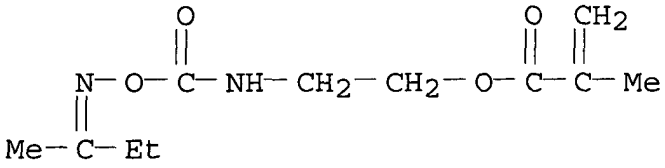
IT **294623-53-3DP**, fluoroalkyl-terminated
(oligomeric; modification of glass with end-capped fluoroalkyl-functional silanes)

RN 294623-53-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 35

IT 336-64-1DP, reaction products with trimethoxyvinylsilane or blocked isocyanate oligomers 29382-69-2DP, Trimethoxyvinylsilane homopolymer, fluoroalkyl-terminated 42514-14-7DP, reaction products with trimethoxyvinylsilane or blocked isocyanate oligomers 56347-79-6DP, reaction products with trimethoxyvinylsilane or blocked isocyanate oligomers 133414-70-7DP, reaction products with trimethoxyvinylsilane or blocked isocyanate oligomers 133414-71-8DP, reaction products with trimethoxyvinylsilane or blocked isocyanate oligomers **294623-53-3DP**, fluoroalkyl-terminated
(oligomeric; modification of glass with end-capped

fluoroalkyl-functional silanes)

L35 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2003 ACS
2002:427153 Document No. 137:338213 Synthesis and soil repellent, antibacterial and antifungal properties of blocked isocyanate co-oligomers having cation segments. Peng, Xinhong; Sato, Masako; Kawase, Tokuzo; Ikeno, Kouji; Sawada, Hideo; Hamada, Nobuo; Wada, Kunimi; Takahashi, Yoshiko; Yoshimura, Tsuyoshi (Graduate School of Human LIfe Science, Osaka City Univ., Osaka, 558-8585, Japan). Sen'i Gakkaishi, 58(5), 163-169 (Japanese) 2002. CODEN: SENGA5. ISSN: 0037-9875. Publisher: Sen'i Gakkai.

AB New type blocked isocyanate co-oligomers having cation segments were synthesized. Soil repellent, antibacterial and antifungal modifications of glass and cellulose by these co-oligomers were studied. Through measuring the contact angles and XPS spectra, it was shown that the glass and cellulose surfaces modified with co-oligomers contg. ammonium and phosphonium segments change to water- and oil-repellent. The surface modified by the co-oligomers contg. phosphonium segments was also found to exhibit a high antibacterial activity against Staphylococcus aureus. Moreover, the co-oligomers contg. phosphonium segments were found to retard the multiplication of Aureobasidium pullulans and Cladosporium cladosporioides even when the concn. of co-oligomer soln. was 0.01 wt%. They also showed antifungal activity against Fomitopsis palustris and Trametes versicolor.

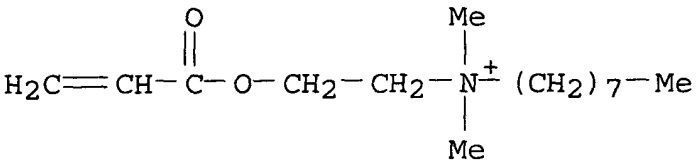
IT **474125-06-9DP**, reaction products with bis(perfluoro-3-oxa-2-methylhexanoyl) peroxide **474125-06-9P**
474125-07-0DP, reaction products with bis(perfluoro-3-oxa-2-methylhexanoyl) peroxide **474125-07-0P**
(synthesis and soil repellent, antibacterial and antifungal properties of blocked isocyanate co-oligomers having cation segments)

RN 474125-06-9 HCAPLUS

CN 1-Octanaminium, N,N-dimethyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

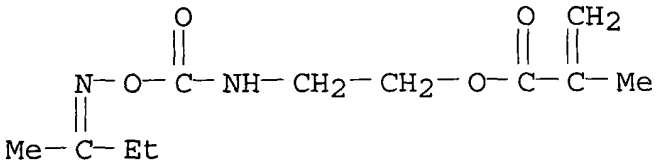
CRN 355806-80-3
CMF C15 H30 N O2 . Cl



● Cl⁻

CM 2

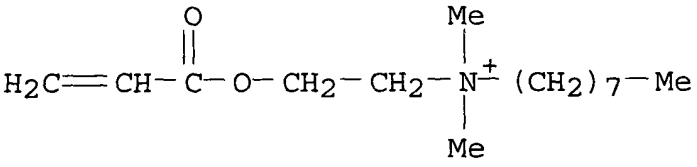
CRN 78279-10-4
CMF C11 H18 N2 O4



RN 474125-06-9 HCAPLUS
CN 1-Octanaminium, N,N-dimethyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

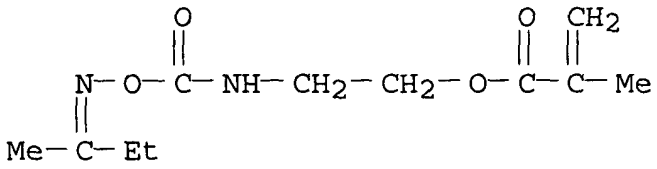
CRN 355806-80-3
CMF C15 H30 N O2 . Cl



● Cl⁻

CM 2

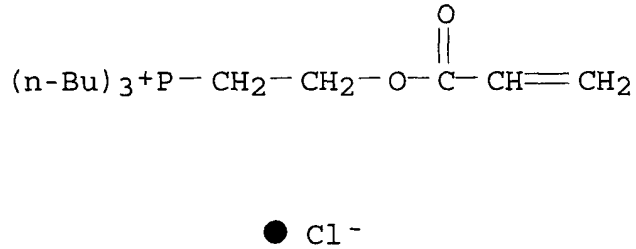
CRN 78279-10-4
CMF C11 H18 N2 O4



RN 474125-07-0 HCAPLUS
CN Phosphonium, tributyl[2-[(1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

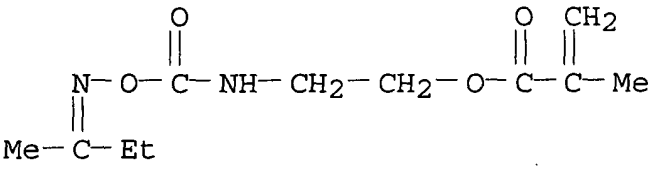
CM 1

CRN 196215-10-8
CMF C17 H34 O2 P . Cl



CM 2

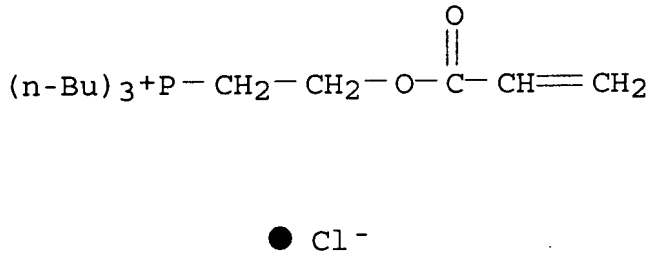
CRN 78279-10-4
CMF C11 H18 N2 O4



RN 474125-07-0 HCAPLUS
CN Phosphonium, tributyl[2-[(1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

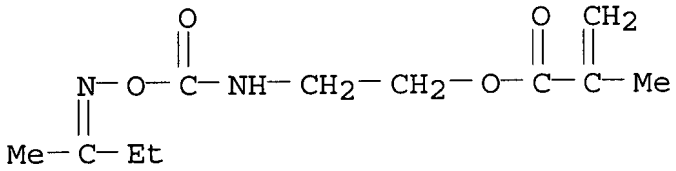
CM 1

CRN 196215-10-8
CMF C17 H34 O2 P . Cl



CM 2

CRN 78279-10-4
CMF C11 H18 N2 O4



CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 37, 43, 57
IT 56347-79-6DP, reaction products with polyacrylates
474125-06-9DP, reaction products with bis(perfluoro-3-oxa-2-methylhexanoyl) peroxide **474125-06-9P**
474125-07-0DP, reaction products with bis(perfluoro-3-oxa-2-methylhexanoyl) peroxide **474125-07-0P**
(synthesis and soil repellent, antibacterial and antifungal properties of blocked isocyanate co-oligomers having cation segments)

L35 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2003 ACS
2002:319617 Document No. 137:47529 Synthesis of Amphiphilic Fluoroalkoxyl End-Capped Cooligomers Containing Oxime-Blocked Isocyanato Segments: Architecture and Applications of New Self-Assembled Fluorinated Molecular Aggregates. Sawada, Hideo; Ikeno, Koji; Kawase, Tokuzo (Department of Chemistry, Nara National College of Technology, Yamatokoriyama Nara, 639-1080, Japan). Macromolecules, 35(11), 4306-4313 (English) 2002. CODEN: MAMOBX. ISSN: 0024-9297. Publisher: American Chemical Society.
AB New fluoroalkoxyl end-capped cooligomers contg. oxime-blocked isocyanato segments were prepd. by the reactions of fluoroalkanoyl

peroxides with isocyanatoethyl methacrylate 2-butanone oxime adduct (IEM-BO) and N,N-dimethylacrylamide (DMAA). Fluoroalkoxyl end-capped IEM-BO-DMAA cooligomers thus obtained were easily sol. in water and common org. solvents except for hexane. These amphiphilic fluoroalkoxyl end-capped cooligomers were able to reduce the surface tension of water quite effectively around to 18 mN/m levels with a clear break point resembling a cmc (crit. micelle concn.). Static and dynamic light scattering measurements showed that fluoroalkoxyl end-capped IEM-BO-DMAA cooligomers are likely to form the self-assembled mol. aggregates in aq. solns. In particular, the longest fluoroalkoxyl end-capped IEM-BO-DMAA cooligomer can form the self-assemblies, which are considered to consist of around 100 fluorinated oligomeric mols. with 17-18 nm size even in the lower concns. of the cooligomer, compared to the other fluoroalkoxylated cooligomers. The mol. assemblies formed by the longest fluoroalkoxyl end-capped IEM-BO-DMAA cooligomer could interact strongly with ethidium bromide (Etd-Br) as a guest mol. to form the host-guest intermol. complex. Addnl., fluoroalkoxyl end-capped IEM-BO-DMAA cooligomers were found to become useful precooligomers for the introduction of various arom. segments into the cooligomer chains. In fact, amphiphilic fluoroalkoxyl end-capped cooligomer-bound functional arom. moieties such as 5-fluorouracil (5-FU) and 9-aminoacridine were prepd. in good yields by the reactions of the corresponding fluorinated precooligomers with the parent arom. compds. In particular interest, it was demonstrated that fluoroalkoxyl end-capped cooligomer-bound 5-FU could have a remarkably strong interaction with oligoDNA.

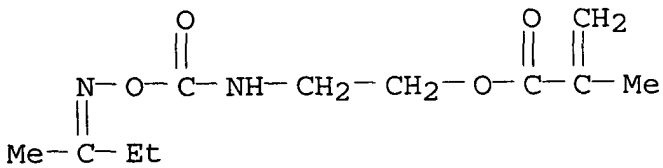
IT **294623-58-8DP**, fluoroalkoxyl-terminated
(synthesis, properties and applications of amphiphilic fluoroalkoxyl end-capped cooligomers contg. oxime-blocked isocyanato segments)

RN 294623-58-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

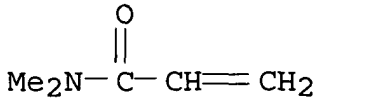
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

CRN 2680-03-7
CMF C5 H9 N O



CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36, 46, 63

IT 51-21-8DP, 5-Fluorouracil, reaction products with fluoroalkoxyl-terminated isocyanatoethyl methacrylate 2-butanone oxime adduct-dimethylacrylamide copolymer 62-53-3DP, Aniline, reaction products with fluoroalkoxyl-terminated isocyanatoethyl methacrylate 2-butanone oxime adduct-dimethylacrylamide copolymer 90-45-9DP, 9-Acridinamine, reaction products with fluoroalkoxyl-terminated isocyanatoethyl methacrylate 2-butanone oxime adduct-dimethylacrylamide copolymer 56347-79-6DP, reaction products with isocyanatoethyl methacrylate 2-butanone oxime adduct-dimethylacrylamide copolymer 133414-70-7DP, reaction products with isocyanatoethyl methacrylate 2-butanone oxime adduct-dimethylacrylamide copolymer 133414-71-8DP, reaction products with isocyanatoethyl methacrylate 2-butanone oxime adduct-dimethylacrylamide copolymer **294623-58-8DP**, fluoroalkoxyl-terminated **294623-58-8DP**, fluoroalkoxyl-terminated, reaction products with fluorouracil or arom. compds.
(synthesis, properties and applications of amphiphilic fluoroalkoxyl end-capped cooligomers contg. oxime-blocked isocyanato segments)

L35 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2003 ACS

2001:664519 Document No. 135:227391 Perfluorodecalyl peroxides, perfluorodecalyl compounds and their preparation. Sawada, Hideo; Tanetani, Toshiyuki; Takishita, Katsuhisa (Ishihara Yakuhin Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001247497 A2 20010911, 15 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-65535 20000309.

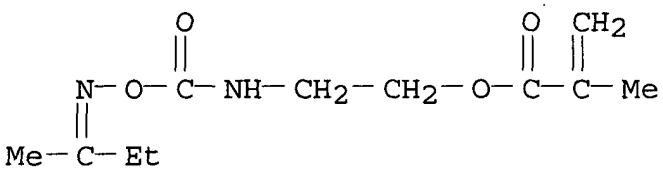
AB The peroxides RfC(CO)OO(O)CRf useful for polymn. initiators or introduction of the perfluoro groups are manufd. by reacting perfluorodecalincarboxylic acid halides with peroxides. The perfluorodecalyl compds. are prepd. by reacting the above peroxides with ethylenic monomers or arom. compds. Reacting .alpha.-perfluorodecalincarboxylic acid with phosphoryl chloride in DMF and treating the resulting acid chloride with H2O2 in a mixed solvent (AK 225) gave bis(perfluorodecalin-1-carbonyl)peroxide in 45% yield. Reaction of polystyrene with this peroxide in AK 224 gave a polystyrene with .alpha.-perfluorodecalyl group.

IT **294623-58-8DP**, perfluorodecalyl-terminated
(perfluorodecalyl peroxides, perfluorodecalyl compds. and their prepn.)

RN 294623-58-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

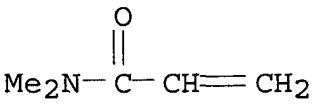
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

CRN 2680-03-7
CMF C5 H9 N O



IC ICM C07C023-18
ICS C07C409-34; C08F004-34; C08F012-00
CC 35-3 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 24
IT 9003-01-4DP, Polyacrylic acid, perfluorodecalyl-terminated 9003-53-6DP, Polystyrene, reaction product with bis(perfluorodecalin-1-carbonyl)peroxide 25609-94-3DP, perfluorodecalyl-terminated 25897-89-6DP, perfluorodecalyl-terminated 26793-34-0DP, N,N-Dimethylacrylamide polymer, perfluorodecalyl-terminated **294623-58-8DP**, perfluorodecalyl-terminated 355862-01-0DP, reaction product with polystyrene 359762-14-4P
(perfluorodecalyl peroxides, perfluorodecalyl compds. and their prepn.)

L35 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2003 ACS
2001:621465 Document No. 135:331955 Curing systems using photolysis of carbamoyloxyimino groups and thermally regenerated isocyanate groups. Suyama, Kanji; Iriyama, Hiroaki; Shirai, Masamitsu; Tsunooka, Masahiro (Department of Applied Chemistry, Osaka Prefecture University, Osaka, 599-8531, Japan). Journal of Photopolymer Science and Technology, 14(2), 155-158 (English) 2001. CODEN: JSTEEW. ISSN: 0914-9244. Publisher: Technical Association

of Photopolymers, Japan.

AB We report the photochem. and thermo chem. behavior of oligomers bearing O-carbamoyloxyimino groups with or without .alpha.-oxo moieties. 2,3-Butandione O-methacryl oyloxyethylcarbamoyloxime (BaMCO) and 2-butanone O-methacryloyloxyethylcarbamoyloxime (BMCO), were oligomerized with Me methacrylate (MMA); The role of .alpha.-oxo moiety is also discussed.

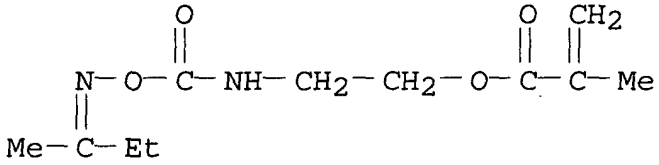
IT **370096-13-2P**
(curing systems using photolysis of carbamoyloxyimino groups and thermally regenerated isocyanate groups)

RN 370096-13-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

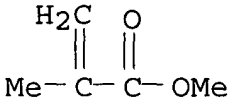
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

CRN 80-62-6
CMF C5 H8 O2



CC 37-3 (Plastics Manufacture and Processing)

IT **370096-13-2P**
(curing systems using photolysis of carbamoyloxyimino groups and thermally regenerated isocyanate groups)

L35 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2003 ACS

2001:137616 Document No. 134:265953 Synthesis of fluoroalkyl end-capped co-oligomers containing 8-hydroxyquinolyl segments and application to oligomer-catalyzed solvolysis reactions. Sawada, Hideo; Hata, Sachiko; Kawasaki, Nobuhito; Kawase, Tokuzo; Fujimori, Ken (Department of Chemistry, Department of Chemistry, Faculty of Advanced Engineering, Nara National College of Technology, Nara,

639-1080, Japan). Journal of Fluorine Chemistry, 107(1), 59-62 (English) 2001. CODEN: JFLCAR. ISSN: 0022-1139. OTHER SOURCES: CASREACT 134:265953. Publisher: Elsevier Science S.A..

AB New fluoroalkyl end-capped co-oligomers contg. 8-hydroxyquinolyl segments were prepd. by the reactions of fluoroalkyl end-capped co-oligomers bearing isocyanato groups. The solvolysis of p-nitrophenyl propanoate (PNP) in the presence of these fluorinated co-oligomers and the corresponding - nonfluorinated co-oligomers was investigated in 3:1 (vol./vol.) aq. methanol buffer soln. (0.05 M phosphate, pH 9.2) at 30.degree.C. A large rate enhancement was obsd. in the presence of the fluorinated co-oligomers for the solvolysis of PNP as compared with the corresponding non-fluorinated co-oligomers. Therefore, these fluoroalkyl end-capped co-oligomers are of particular interest as new fluorinated biomimetic systems for enzyme catalysts.

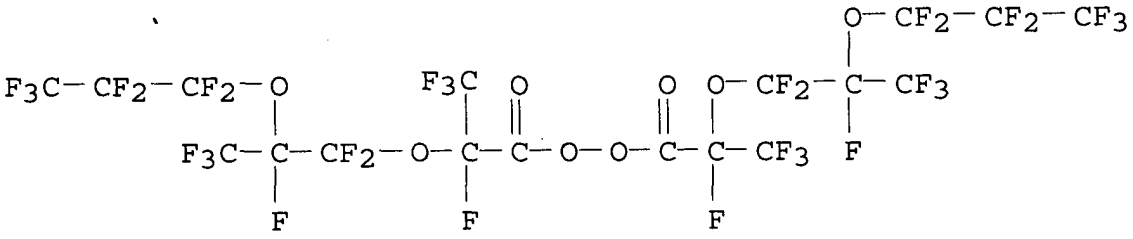
IT **288863-41-2P**
(post-treatment with 5-amino-8-hydroxyquinoline; synthesis of fluoroalkyl end-capped co-oligomers contg. 8-hydroxyquinolyl segments and application to biomimetic oligomer-catalyzed solvolysis reactions)

RN 288863-41-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with N,N-dimethyl-2-propenamide and 1,1,1,2,2,3,3,5,6,6,8,13,15,15,16,18,18,19,19,20,20,20-docosafluoro-9,12-dioxo-5,8,13,16-tetrakis(trifluoromethyl)-4,7,10,11,14,17-hexaoxaeicosane (9CI) (CA INDEX NAME)

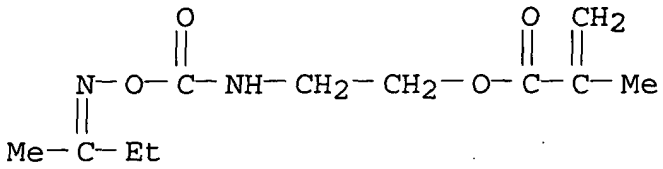
CM 1

CRN 133414-70-7
CMF C18 F34 O8



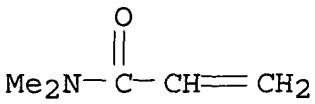
CM 2

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 3

CRN 2680-03-7
CMF C5 H9 N O



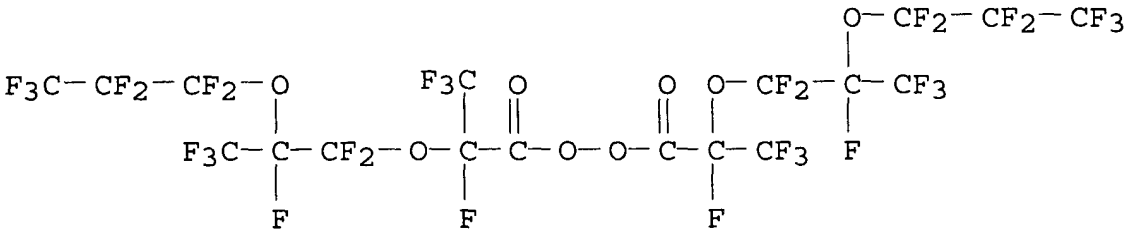
IT **288863-41-2DP**, reaction products with 5-amino-8-hydroxyquinoline **331714-49-9DP**, reaction products with 5-amino-8-hydroxyquinoline
(synthesis of fluoroalkyl end-capped co-oligomers contg. 8-hydroxyquinolyl segments and application to biomimetic oligomer-catalyzed solvolysis reactions)

RN 288863-41-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with N,N-dimethyl-2-propenamide and 1,1,1,2,2,3,3,5,6,6,8,13,15,15,16,18,18,19,19,20,20,20-docosafluoro-9,12-dioxo-5,8,13,16-tetrakis(trifluoromethyl)-4,7,10,11,14,17-hexaoxaeicosane (9CI) (CA INDEX NAME)

CM 1

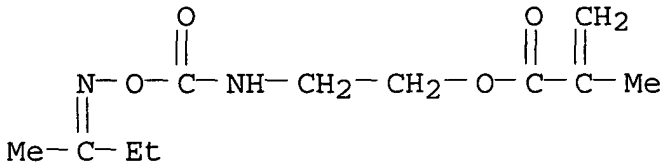
CRN 133414-70-7
CMF C18 F34 O8



CM 2

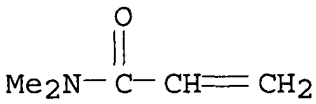
CRN 78279-10-4

CMF C11 H18 N2 O4



CM 3

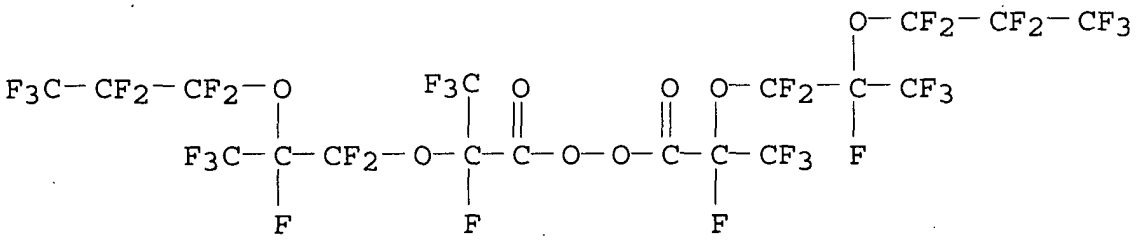
CRN 2680-03-7
CMF C5 H9 N O



RN 331714-49-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with 1,1,1,2,2,3,3,5,6,6,8,13,15,15,16,18,18,19,19,20,20,20-docosafluoro-9,12-dioxo-5,8,13,16-tetrakis(trifluoromethyl)-4,7,10,11,14,17-hexaoxaeicosane and 4-(1-oxo-2-propenyl)morpholine (9CI) (CA INDEX NAME)

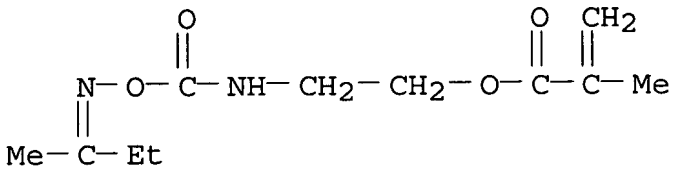
CM 1

CRN 133414-70-7
CMF C18 F34 O8



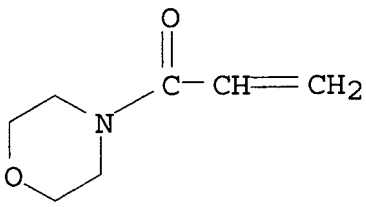
CM 2

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 3

CRN 5117-12-4
CMF C7 H11 N O2



CC 22-4 (Physical Organic Chemistry)
Section cross-reference(s): 7, 35

IT **288863-41-2P**
(post-treatment with 5-amino-8-hydroxyquinoline; synthesis of fluoroalkyl end-capped co-oligomers contg. 8-hydroxyquinolyl segments and application to biomimetic oligomer-catalyzed solvolysis reactions)

IT 13207-66-4DP, 5-Amino-8-hydroxyquinoline, reaction products with fluoroalkyl end-capped co-oligomers **288863-41-2DP**, reaction products with 5-amino-8-hydroxyquinoline **331714-49-9DP**, reaction products with 5-amino-8-hydroxyquinoline
(synthesis of fluoroalkyl end-capped co-oligomers contg. 8-hydroxyquinolyl segments and application to biomimetic oligomer-catalyzed solvolysis reactions)

L35 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2003 ACS

2000:658087 Document No. 133:253950 Fluorohydrocarbyl group-containing compounds useful as surface treatment agents and coating additives and production method thereof. Sawada, Hideo; Tanetani, Toshiyuki; Takishita, Katsuhisa (Ishihara Yakuhin Co., Ltd., Japan; Showa Denko K. K.). Jpn. Kokai Tokkyo Koho JP 2000256302 A2 20000919, 24 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-65659 19990311.

AB Title compds. are represented by the general formula Rf[A(Z)]n(B)mRf, where Rf = (modified) fluorohydrocarbyl; A(Z) = Z-substituted vinyl monomer unit ; Z = COOR1 or CONR2R3; R1, R2 = (blocked) isocyanate group-contg. hydrocarbyl; R3 = H, hydrocarbyl, or (blocked) isocyanate group-contg. hydrocarbyl; B = (substituted) vinyl monomer unit; n = 1-5000; and m = 0-5000. The compds. are

obtained by a reaction of fluoroalkanoyl peroxides RfC(:O)OOC(:O)Rf, Z-substituted vinyl monomers, and (substituted) vinyl monomers. Thus, 3.17 g isocyanatoethyl methacrylate-Me Et ketoxime and 1.86 g di(perfluorobutyryl) peroxide were reacted at 45.degree. for 5 h to give 2.92 g fluoroalkyl-terminated methacrylate polymer C3F7[CH2C(COOCH2CH2NHCO2N:CEtMe)Me]nC3F7. A PET was treated with the fluoroalkyl-terminated methacrylate polymer showing water and oil repellency.

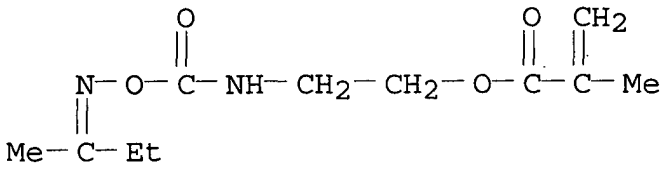
IT **294623-53-3DP**, fluoroalkyl-terminated **294623-58-8DP**, fluoroalkyl-terminated
(prepn. of fluoroalkyl-terminated acrylic polymers useful as surface treatment agents and coating additives)

RN 294623-53-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4

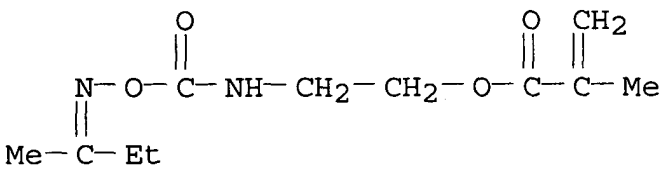


RN 294623-58-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

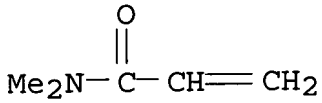
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

CRN 2680-03-7
CMF C5 H9 N O

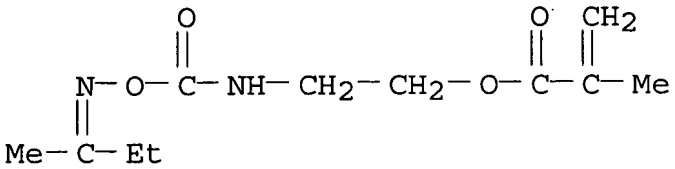


IC ICM C07C271-60
ICS C07C269-06; C07D223-10; C08F220-36; C08F220-60; C08G018-73; C09D007-12; C09K003-18
CC 42-5 (Coatings, Inks, and Related Products)
Section cross-reference(s): 35
IT 336-64-1DP, Di(perfluorobutyryl) peroxide, reaction products with blocked isocyanate group-contg. methacrylate polymers 56347-79-6DP, Di(perfluoro-2-methyl-3-oxahexanoyl) peroxide, reaction products with blocked isocyanate group-contg. methacrylate polymers 88007-27-6DP, fluoroalkyl-terminated 133414-70-7DP, reaction products with blocked isocyanate group-contg. methacrylate polymers **294623-53-3DP**, fluoroalkyl-terminated 294623-54-4DP, fluoroalkyl-terminated 294623-55-5DP, fluoroalkyl-terminated 294623-56-6DP, fluoroalkyl-terminated 294623-57-7DP, fluoroalkyl-terminated **294623-58-8DP**, fluoroalkyl-terminated
(prepn. of fluoroalkyl-terminated acrylic polymers useful as surface treatment agents and coating additives)

L35 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2003 ACS
2000:447138 Document No. 133:187663 Synthesis of a novel fluoroalkylated end-capped oligomer-bound antitumor segments and interaction of this oligomer with DNA. Sawada, Hideo; Ikeno, Koji; Kawase, Tokuzo (Department of Chemistry, Faculty of Advanced Engineering, Nara National College of Technology, Nara, 639-1080, Japan). European Polymer Journal, 36(9), 2051-2053 (English) 2000. CODEN: EUPJAG. ISSN: 0014-3057. Publisher: Elsevier Science Ltd..
AB New water-sol. fluoroalkylated end-capped co-oligomer-bound antitumor agents such as 5-fluorouracil were prepd. in good yields by the reaction of the corresponding isocyanate-blocked co-oligomers with the parent antitumor agents under mild conditions and fluoroalkylated end-capped co-oligomer-bound 5-fluorouracil could have a remarkably strong interaction with DNA.
IT **288863-40-1DP**, reaction products with 5-fluorouracil **288863-41-2DP**, reaction products with 5-fluorouracil **288863-42-3DP**, reaction products with 5-fluorouracil
(prepn. of a fluoroalkylated end-capped oligomer-bound antitumor segments and interaction of this oligomer with DNA)
RN 288863-40-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with bis[2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-1-oxopropyl] peroxide and N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

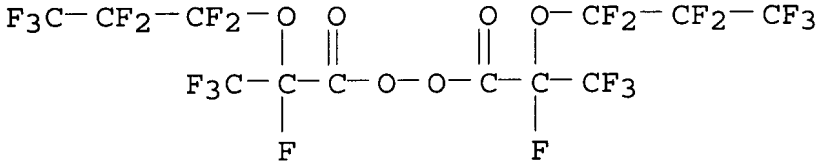
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



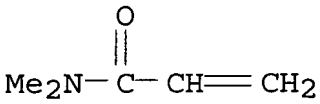
CM 2

CRN 56347-79-6
CMF C12 F22 O6



CM 3

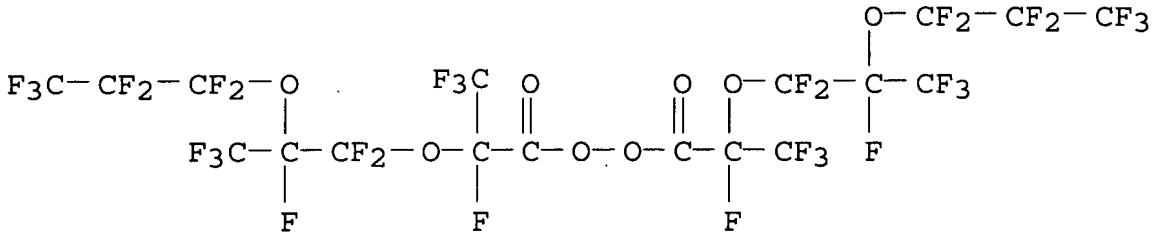
CRN 2680-03-7
CMF C5 H9 N O



RN 288863-41-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with N,N-dimethyl-2-propenamide and 1,1,1,2,2,3,3,5,6,6,8,13,15,15,16,18,18,19,19,20,20,20-docosafluoro-9,12-dioxo-5,8,13,16-tetrakis(trifluoromethyl)-4,7,10,11,14,17-hexaoxaeicosane (9CI) (CA INDEX NAME)

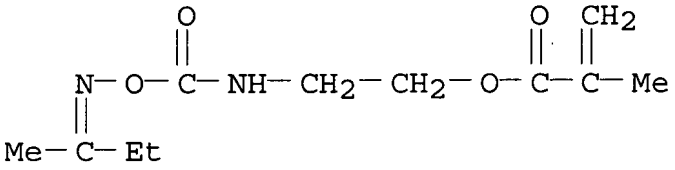
CM 1

CRN 133414-70-7
CMF C18 F34 O8



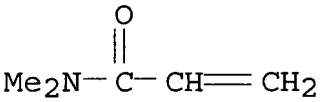
CM 2

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 3

CRN 2680-03-7
CMF C5 H9 N O

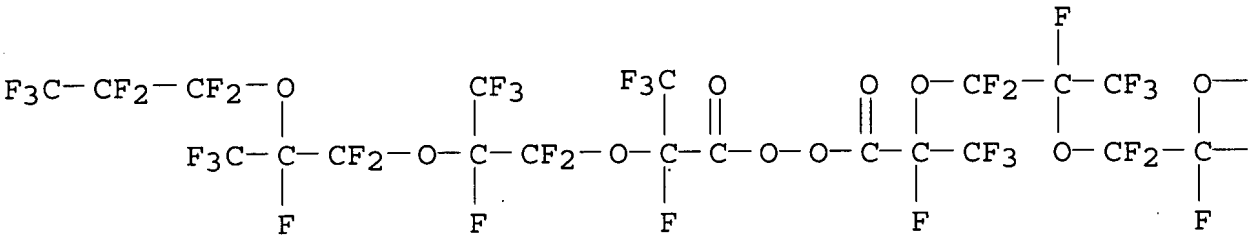


RN 288863-42-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl ester, polymer with N,N-dimethyl-2-propenamide and 1,1,1,2,2,3,3,5,6,6,8,9,9,11,16,18,18,19,21,21,22,24,24,25,25,26,26,26-octacosafluoro-12,15-dioxo-5,8,11,16,19,22-hexakis(trifluoromethyl)-4,7,10,13,14,17,20,23-octaoxahexacosane (9CI) (CA INDEX NAME)

CM 1

CRN 133414-71-8
CMF C24 F46 O10

PAGE 1-A



PAGE 1-B

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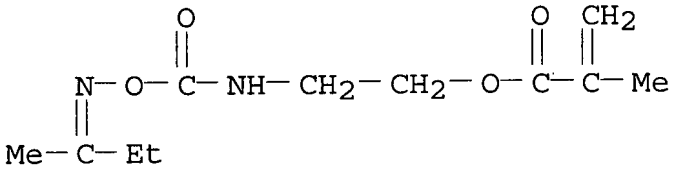
— CF_3

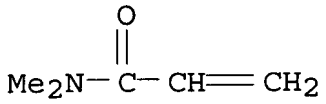
CM 2

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 3

CRN 2680-03-7
CMF C5 H9 N O



CC 1-6 (Pharmacology)
Section cross-reference(s): 35

IT 51-21-8DP, 5-Fu, reaction products with fluoroalkyl end-capped oligomers **288863-40-1DP**, reaction products with

5-fluorouracil **288863-41-2DP**, reaction products with
5-fluorouracil **288863-42-3DP**, reaction products with
5-fluorouracil
(prepn. of a fluoroalkylated end-capped oligomer-bound antitumor segments and interaction of this oligomer with DNA)

L35 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2003 ACS
1998:94638 Document No. 128:155079 Treatment of polyamide composite reverse osmosis membrane. Hirose, Masahiko; Ito, Hiroki; Tanaka, Kazuo (Nitto Denko Corp., Japan). Jpn. Kokai Tokkyo Koho JP 10033959 A2 19980210 Heisei, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-197989 19960726.

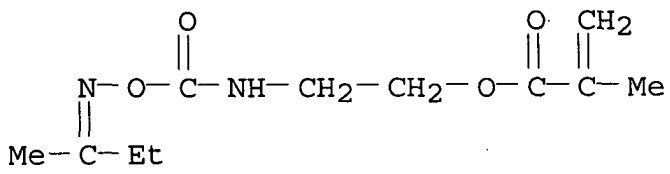
AB The membrane, with good water permeability and useful for treatment of water, is prepd. by treating a membrane comprising a porous substrate and a neg. elec. charged polyamide skin layer (surface roughness .gtoreq.55 nm), prepd. from a multifunctional amine compd. contg. .gtoreq.2 reactive amino groups and a multifunctional halogen compd. contg. .gtoreq.2 acid halide groups with a cationic org. and/or an amphoteric org. compd. soln. Thus, contacting a porous polysulfone substrate with an aq. soln. contg. m-phenylenediamine, Na laurylsulfate triethylamine, camphor sulfonic acid and iso-Pr alc. then with trimesic acid chloride in hexane soln. gave a product of polyamide skin layer on a substrate, wherein the product was coated with an aq. soln. contg. 1,4-azabicyclo(2,2,2)octane and a block copolymer of Me Et ketoxime, 2-methacryloyloxyethylene isocyanate and hydroxypropyltrimethylammonium chloride methacrylate and heated at 150.degree. gave a reverse osmosis membrane having permeation rejection rate 99% and water permeation 1.5 M3/m2-day for an aq. soln. (pH 6.5) contg. 1500 ppm NaOH soln. at 15 kg/cm2.

IT **202717-69-9**
(surface treatment soln.; treatment of polyamide composite reverse osmosis membrane)

RN 202717-69-9 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

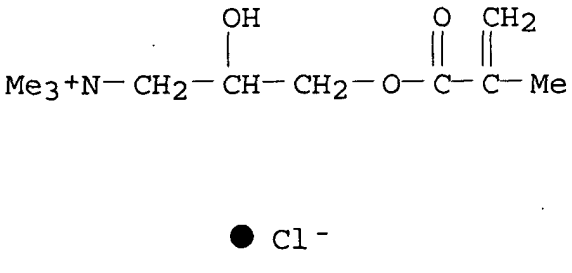
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



CM 2

CRN 13052-11-4
CMF C10 H20 N O3 . Cl

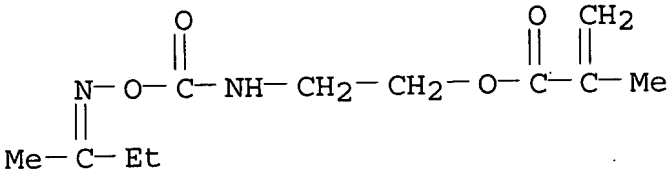


IC ICM B01D071-56
ICS B01D061-02; B01D069-12; B01D071-58; C08G069-26
CC 38-2 (Plastics Fabrication and Uses)
IT 75133-03-8 **202717-69-9**
(surface treatment soln.; treatment of polyamide composite reverse osmosis membrane)

L35 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2003 ACS
1995:606585 Document No. 123:10894 Vinyl compound polymer curable compositions and film layers therefrom. Yamamura, Kazuo; Ooka, Masataka (Dainippon Ink Chemical Industry Co., Japan). PCT Int. Appl. WO 9424212 A1 19941027, 72 pp. DESIGNATED STATES: W: DE, JP, US. (Japanese). CODEN: PIXXD2. APPLICATION: WO 1994-JP648 19940420. PRIORITY: JP 1993-92968 19930420; JP 1993-94295 19930421; JP 1993-221115 19930906; JP 1993-262344 19931020; JP 1993-319700 19931220; JP 1994-39632 19940310.
AB The title compns., useful as acid-resistant coating materials, adhesives, and sealants, contain substituted Me ester group and .gtoreq.1 active hydrogen group and/or epoxy group (e.g., acrylic polymers).
IT **163756-41-0**
(vinyl compd. polymer curable compns. and film layers therefrom)
RN 163756-41-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butoxymethyl ester, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate and 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

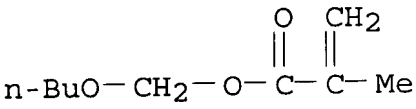
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



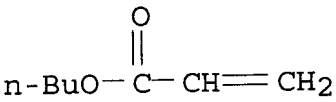
CM 2

CRN 22205-34-1
CMF C9 H16 O3



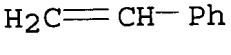
CM 3

CRN 141-32-2
CMF C7 H12 O2



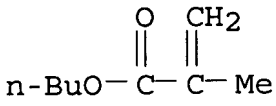
CM 4

CRN 100-42-5
CMF C8 H8



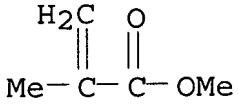
CM 5

CRN 97-88-1
CMF C8 H14 O2



CM 6

CRN 80-62-6
CMF C5 H8 O2



IC ICM C08L101-00
ICS C08F220-28; C08F220-32; C08F218-16
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 42
IT 36179-98-3, Butyl acrylate-butyl methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate-styrene copolymer 37625-56-2, .epsilon.-Caprolactone-trimethylolpropane copolymer 38639-71-3, Butyl acrylate-butyl methacrylate-glycidyl methacrylate-styrene copolymer 60100-92-7, Butyl acrylate-butyl methacrylate-glycidyl methacrylate-methyl methacrylate-styrene copolymer 70368-73-9, Dimethyl terephthalate-1,6-hexanediol-neopentyl glycol-terephthalic acid-trimethylolpropane copolymer 96828-11-4 163756-26-1
163756-28-3 163756-30-7 163756-31-8 163756-32-9 163756-33-0
163756-34-1 163756-36-3 163756-37-4 163756-38-5 163756-39-6
163756-40-9 **163756-41-0** 163756-42-1 163756-43-2
163756-44-3 163756-45-4 163756-46-5 163756-47-6 163756-48-7
163756-49-8 163756-50-1 163756-51-2 163756-52-3 163756-53-4
163756-54-5 163756-55-6 163756-56-7
(vinyl compd. polymer curable compns. and film layers therefrom)

L35 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2003 ACS
1987:86306 Document No. 106:86306 Shear-resistant cationic latex. Kunz, Barbara L.; Kaffen, Sharon L.; Drexler, Victoria A. (SCM Corp., USA). Eur. Pat. Appl. EP 197411 A2 19861015, 22 pp. DESIGNATED STATES: R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1986-104003 19860324. PRIORITY: US 1985-716665 19850327; US 1985-716664 19850327.
AB Cationic latexes with good mech. stability useful in electrophoretic coating, contain structured, cation-active emulsion polymers and 0.5-25 phr oxirane-free, cationic resin. A latex (av. particle size 5200 .ANG.) (prepd. from Bu acrylate 49.95, Me methacrylate 29.99, MEK oxime-blocked 2-isocyanatoethyl methacrylate 11.00, hydroxypropyl methacrylate 9.86, 2-(dimethylamino)ethyl methacrylate 0.20, and H2O 100 parts) was mixed (200 g) with 13.6 phr cationic

resin [prepd. from Me2N(CH2)3NH2 8.52 mol parts, epoxy resin (DER 671) 5439 parts, and C16 epoxide 500 parts and neutralized with HCO2H] to give a latex showing no mech. agglomeration. A similar compn. electrocoated at 100, 150, and 200 V gave a film with thickness 0.90, 0.86, and 0.84 mil, resp.; vs. no film formation without the cationic resin.

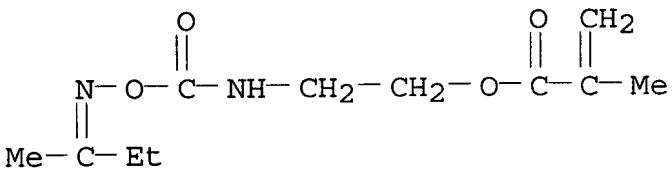
IT **102826-38-0**
(latexes, shear-resistant, for electrophoretic coating)

RN 102826-38-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate and 1,2-propanediol mono(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

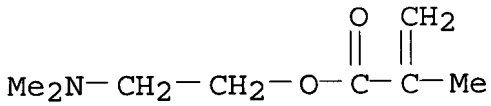
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



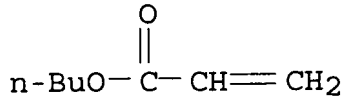
CM 2

CRN 2867-47-2
CMF C8 H15 N O2



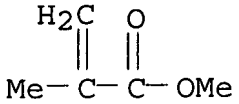
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2

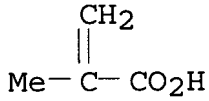


CM 5

CRN 27813-02-1
CMF C7 H12 O3
CCI IDS

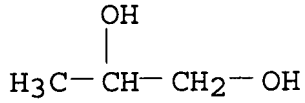
CM 6

CRN 79-41-4
CMF C4 H6 O2



CM 7

CRN 57-55-6
CMF C3 H8 O2



IC ICM C08F002-28
ICS C08F283-00; C09D003-00
CC 42-7 (Coatings, Inks, and Related Products)
IT 85931-85-7, Butyl acrylate-2-(dimethylamino)ethyl methacrylate-hydroxypropyl methacrylate-methyl methacrylate-styrene copolymer **102826-38-0** 106796-71-8
(latexes, shear-resistant, for electrophoretic coating)

L35 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2003 ACS
1986:408048 Document No. 105:8048 Stabilized cationic latex. Kaffen,

Sharon L.; Drexler, Victoria A. (SCM Corp. , USA). U.S. US 4579889 A 19860401, 10 pp. (English). CODEN: USXXAM. APPLICATION: US 1985-716664 19850327.

AB Stabilized cationic latex coating compns. contain small amts. of linear cationic amine-modified epoxy resin (400-1500 mol. wt.) having tertiary amine functionality and a base no. of 30-500. Such coatings remain substantially nonagglomerated even after being subjected to pumping and shear. Thus, 8.52 mol parts (dimethylamino)propylamine was mixed with 41 wt. parts xylene and refluxed under an inert atm., while 5.18 mol parts DER-671 was added over 2 h. The mixt. was heated to .apprx.365.degree.F and excess amine and xylene distd. off. Then 500 wt. parts of a C16 .alpha.-olefin epoxide was added over 90 min with stirring, followed by 3151 wt. parts 2-butoxyethanol. The product was .apprx.62% nonvolatile and had a base no. of .apprx.130. This amine adduct was neutralized with an aq. 85% lactic acid soln. To a 200-mL aliquot of an all-acrylic cationic latex (wt.-av. particle size .apprx.520 nm), the epoxy-amine adduct was added with stirring and allowed to equilibrate overnight. The amine adduct represented 13.6% of the total resin wt. and no particle agglomeration was obsd. in centrifuge photosedimentometer tests, in contrast to unstabilized control expts.

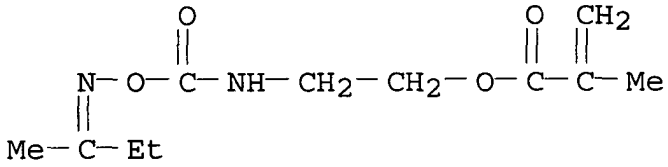
IT **102826-38-0**
(emulsions, stabilizers for, amine-epoxide adducts as)

RN 102826-38-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate and 1,2-propanediol mono(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

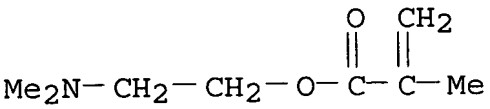
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



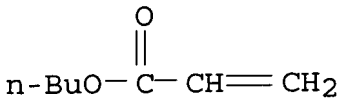
CM 2

CRN 2867-47-2
CMF C8 H15 N O2



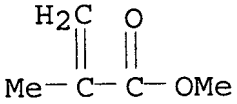
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2

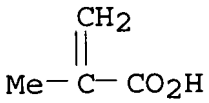


CM 5

CRN 27813-02-1
CMF C7 H12 O3
CCI IDS

CM 6

CRN 79-41-4
CMF C4 H6 O2



CM 7

CRN 57-55-6

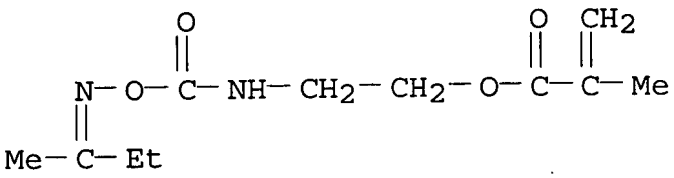
CMF C3 H8 O2

IC ICM C09D005-44
ICS C09D003-58
NCL 523414000
CC 42-7 (Coatings, Inks, and Related Products)
Section cross-reference(s): 35
IT 85931-85-7 **102826-38-0**
(emulsions, stabilizers for, amine-epoxide adducts as)

L35 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2003 ACS
1985:205512 Document No. 102:205512 Cathodic electrocoating composition with latex binder. Abbey, Kirk J.; Kunz, Barbara L.; Erickson, James R. (SCM Corp. , USA). Eur. Pat. Appl. EP 132698 A2 19850213, 46 pp. DESIGNATED STATES: R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1984-108091 19840710. PRIORITY: US 1983-513619 19830714; US 1983-513621 19830714; US 1983-513620 19830714.
AB Cataphoretic coating compns. giving films with good gloss, adhesion, and durability contain aq. suspensions of cationic, amine deriv.-stabilized binders. The binders are free of unreacted amines, contain .ltorsim. 15 phr material (including solvents) with mol. wt. .ltoreq.330, and have glass temp. .gtoreq.20.degree. and gel content .ltoreq.10%. Thus, a latex from Bu acrylate 49.6, styrene 37.7, 2-(dimethylamino)ethyl methacrylate 4.2, and hydroxypropyl methacrylate 8.7 parts was cation-exchanged with Amberlite 200C to remove low-mol.-wt. amine derivs. and electrodeposited to give a uniform film with good adhesion and no secondary deposition.
IT **96527-00-3P 96529-18-9P**
(latex coatings, purifn. of, for good film properties)
RN 96527-00-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, phosphate, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

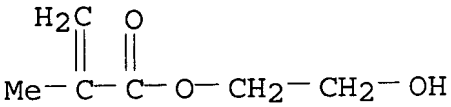
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



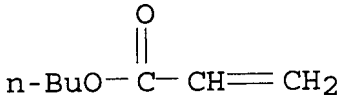
CM 2

CRN 868-77-9
CMF C6 H10 O3



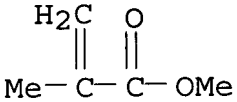
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2

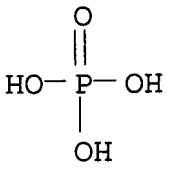


CM 5

CRN 95215-19-3
CMF C8 H15 N O2 . x H3 O4 P

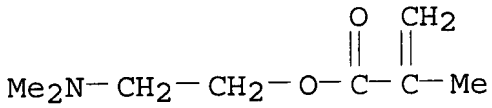
CM 6

CRN 7664-38-2
CMF H3 O4 P



CM 7

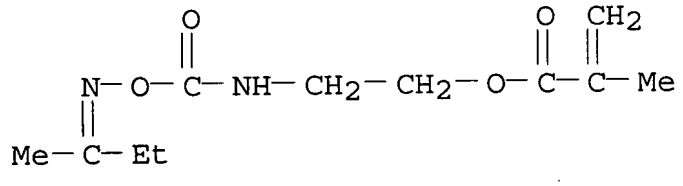
CRN 2867-47-2
CMF C8 H15 N O2



RN 96529-18-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, phosphate, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate and 1,2-propanediol mono(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

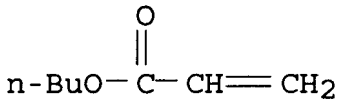
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



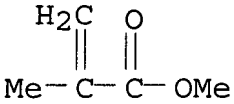
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2

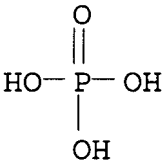


CM 4

CRN 95215-19-3
CMF C8 H15 N O2 . x H3 O4 P

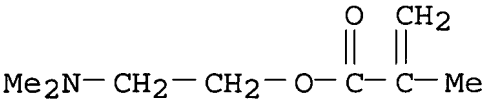
CM 5

CRN 7664-38-2
CMF H3 O4 P



CM 6

CRN 2867-47-2
CMF C8 H15 N O2

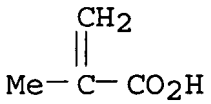


CM 7

CRN 27813-02-1
CMF C7 H12 O3
CCI IDS

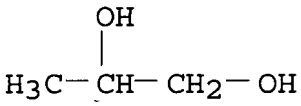
CM 8

CRN 79-41-4
CMF C4 H6 O2



CM 9

CRN 57-55-6
CMF C3 H8 O2



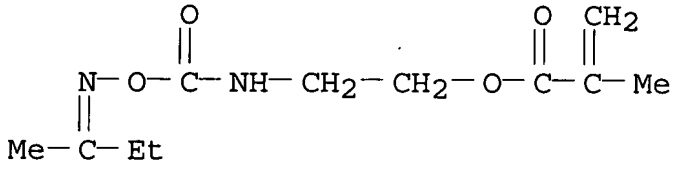
IC ICM C25D013-06
CC 42-7 (Coatings, Inks, and Related Products)
IT **96527-00-3P** 96529-16-7P 96529-17-8P **96529-18-9P**
96542-69-7P
(latex coatings, purifn. of, for good film properties)

L35 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2003 ACS
1984:157068 Document No. 100:157068 Isocyanatoethyl methacrylate. III: Polymerization, formulation and evaluation of blocked IEM derivatives. Regulski, T.; Thomas, M. R. (Cent. Res.-Polym. Res., Dow Chem. Co., Midland, MI, 48640, USA). Organic Coatings and Applied Polymer Science Proceedings, 48, 1003-7 (English) 1983. CODEN: OCAPDE. ISSN: 0732-7528.
AB Over 30 copolymers of Et acrylate and Me methacrylate with blocked isocyanatoethyl methacrylate (I) derivs. were prepd. The lowest curing temps. belonged to copolymers contg. I derivs. blocked with phenols and imidazole (110-130.degree.) followed by oximes (130-150.degree.), N-hydroxyimides (160-175.degree.), alcs. (175-200.degree.), lactams (175-250.degree.), and Et acetoacetate (>175.degree.).
IT **78279-11-5P**
(prepn. and crosslinking of)
RN 78279-11-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate and 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino

]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

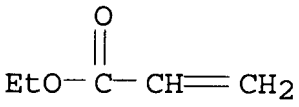
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



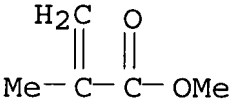
CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 42
IT 78279-09-1P **78279-11-5P** 89743-57-7P 89743-59-9P
89743-60-2P 89743-62-4P 89743-63-5P 89761-50-2P 89761-52-4P
89761-54-6P 89761-56-8P 89770-85-4P 89777-75-3P 89823-31-4P
(prepn. and crosslinking of)

L35 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2003 ACS
1981:444870 Document No. 95:44870 Epoxy resin coating compositions. Oriel, Sharon L.; Tefertiller, Nancy B.; Bozzelli, John W.; Regulski, Thomas W. (Dow Chemical Co., USA). U.S. US 4264748 19810428, 5 pp. (English). CODEN: USXXAM. APPLICATION: US 1980-116371 19800128.

AB Light- and chem.-resistant coatings contain an epoxy resin having a plurality of active hydrogens and an addn. polymer of an isocyanatoalkyl ester of an .alpha., .beta.-ethylenically unsatd. carboxylic acid as a crosslinking agent. Thus, 10 g 50:50 2-ethoxyethyl acetate (I)-MeCOBu-iso contg. 40% bisphenol A-epichlorohydrin copolymer [25068-38-6] (epoxide equiv. wt. 475-575 and hydroxy equiv. wt. 405-445) was mixed with 10.16 g I soln. (49% solids) of 35:30:35 Et acrylate-2-isocyanatoethyl methacrylate-Me methacrylate copolymer [76950-72-6] (no.-av. mol. wt. 20,000, NCO content 8.05%) so that the NCO-OH mol. ratio was 1:1, then mixed with 0.4% Pb octoate as a 24% I soln. to give a coating formulation. A 0.8721-mm-thick layer of this formulation on a steel panel was baked 15 min at 100.degree. to give a coating with hardness 4H, solvent resistance .gtoreq.100 MEK double rubs, and cross-hatch adhesion loss value <1% before weathering and 6H, .gtoreq.100 MEK double rubs, and 2%, resp., after a 1000-h exposure in a Weather-O-Meter.

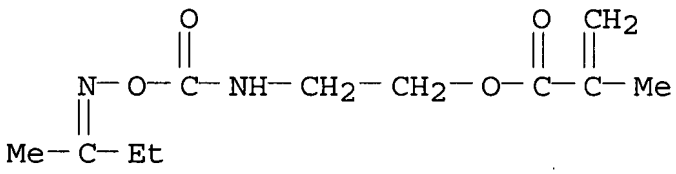
IT **78279-11-5**
(crosslinking agents, for epoxy coatings)

RN 78279-11-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate and 2-[[[[(1-methylpropylidene)amino]oxy]carbonyl]amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

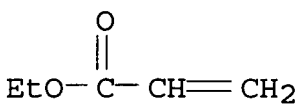
CM 1

CRN 78279-10-4
CMF C11 H18 N2 O4



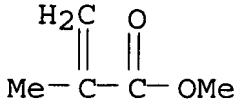
CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



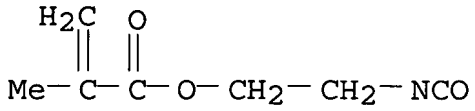
IC C08L063-00
NCL 525109000
CC 42-8 (Coatings, Inks, and Related Products)
Section cross-reference(s): 55
IT 76950-72-6 78279-09-1 **78279-11-5**
(crosslinking agents, for epoxy coatings)

=> d l36 1-5 cbib abs hitstr hitind

L36 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2003 ACS
1998:389201 Document No. 129:55464 Acrylic copolymers and leveling agents based on them for powder coatings. Kosaka, Kaoru; Uramatsu, Sachio (Kyoeisha Chemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10158336 A2 19980616 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-321642 19961202.
AB The copolymers are composed of (A) C2-22-alkyl (meth)acrylate and/or C2-22-alkenyl (meth)acrylate units, (B) monocarboxylic acid- or monoamine-linked isocyanate-modified acrylic units, and optionally (C) (meth)acrylate units having functional groups for diisocyanates and have no-av. mol. wt. (Mn) 4000-100,000. Thus, 324 parts stearyl acrylate was polymd. with 111 parts methacryloyl isocyanate in BuOAc in the presence of dodecyl mercaptan and AIBN and further treated with 281 parts stearic acid to give a copolymer with Mn 9300. A glossy and smooth coating was obtained from a polyester-polyisocyanate-epoxy resin powder compn. contg. the copolymer as a leveling agent.
IT **83729-34-4DP**, 2-Ethylhexyl acrylate-2-(methacryloyloxy)ethyl isocyanate copolymer, reaction products with behenic acid
(acrylic polymer leveling agents for powder coatings)
RN 83729-34-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-isocyanatoethyl ester, polymer with 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

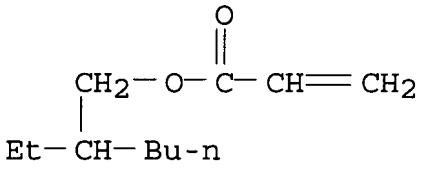
CM 1

CRN 30674-80-7
CMF C7 H9 N O3



CM 2

CRN 103-11-7
CMF C11 H20 O2



IC ICM C08F220-00
ICS C09D005-03; C09D007-06; C09D133-00
CC 42-5 (Coatings, Inks, and Related Products)
IT 57-11-4DP, Octadecanoic acid, reaction products with isocyanate-contg. acrylic polymers, uses 112-85-6DP, Docosanoic acid, reaction products with ethylhexyl acrylate-methacryloyloxyethyl isocyanate copolymer 112-99-2DP, Distearylamine, reaction products with hydroxyethyl acrylate-stearyl acrylate-TDI copolymer **83729-34-4DP**, 2-Ethylhexyl acrylate-2-(methacryloyloxy)ethyl isocyanate copolymer, reaction products with behenic acid 208757-02-2DP, Methacryloyl isocyanate-stearyl acrylate copolymer, reaction products with stearic acid 208757-03-3DP, 2-Hydroxyethyl acrylate-stearyl acrylate-TDI copolymer, reaction products with carboxylic acids or amines
(acrylic polymer leveling agents for powder coatings)

L36 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2003 ACS
1997:613847 Document No. 127:279425 Thermoplastic elastomers based on block copolymers, their manufacture, and compositions and molded articles containing these elastomers. Bitler, Steven P.; Stewart, Ray F.; Kamp, David A.; Freelin, Robert G.; Yoon, Valentine Y. (Landec Corp., USA). U.S. US 5665822 A 19970909, 24 pp., Cont.-in-part of U.S. Ser. No. 773,047, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1993-48280 19930414. PRIORITY: US 1991-773047 19911007; US 1991-773047 19911007; US 1992-957270 19921006.
AB Thermoplastic elastomers (TPEs) contg. side chain cryst. (SCC) blocks. The SCC blocks my be hard (A) blocks or the soft (B) blocks (or both) in the TPE. Some of these TPEs are novel, e.g. those in which A blocks are SCC blocks, and the B blocks are polyethers,

polyacrylates, polyamides, polyurethanes or polysiloxanes. The SCC-contg. TPEs are particularly useful as pressure-sensitive adhesives and as matrix materials for other components which are dispersed therein, e.g. energetic solids and other thermally responsive materials that are reactive at temps. above the m.p. of the SCC. A typical elastomer was manufd. by stirring 27.82 g TDI with 100 g POLY-THF 650 in PhMe contg. dibutyltin dilaurate 22 h, adding 0.783 g 2-aminoethanethiol as a PhMe soln., aging the mixt. 24 h, adding 42.71 g octadecyl acrylate and 0.433 g AIBN, and heating 18 h at 60.degree..

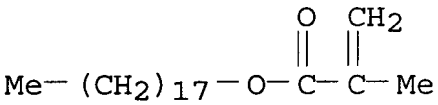
IT **120516-25-8P**
(elastomer precursor; thermoplastic elastomers based on block copolymers having cryst. side chains for pressure-sensitive adhesives and matrixes for thermally responsive materials)

RN 120516-25-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-isocyanatoethyl ester, polymer with octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

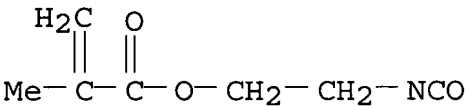
CM 1

CRN 32360-05-7
CMF C22 H42 O2



CM 2

CRN 30674-80-7
CMF C7 H9 N O3



IC ICM C08L053-00

NCL 525-92C

CC 39-4 (Synthetic Elastomers and Natural Rubber)
Section cross-reference(s): 19, 51

IT **120516-25-8P** 182688-75-1P 195451-19-5P 195451-20-8P 195451-21-9P 195451-22-0P 195451-24-2P 195451-27-5P 195451-30-0P 195451-31-1P
(elastomer precursor; thermoplastic elastomers based on block copolymers having cryst. side chains for pressure-sensitive adhesives and matrixes for thermally responsive materials)

L36 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS
1989:516492 Document No. 111:116492 Isocyanate-containing polymers and oligomers as adhesives for medical and veterinary applications. Brauer, G. M.; Lee, C. H. (United States Dept. of Health and Human Services, USA). U. S. Pat. Appl. US 195000 A0 19890215, 43 pp. Avail. NTIS Order No. PAT-APPL-7-195 000. (English). CODEN: XAXXAV. APPLICATION: US 1988-195000 19880517.

AB Adhesives, useful for medical, dental, and veterinary applications, comprise solns. of oligomers, polymers, and copolymers of acrylates, methacrylates, and/or styrene with vinyl monomers contg. pendent isocyanate groups in inert solvents, wherein the mol. wt. of the material is 800-30,000. Bu methacrylate-m-isopropenyl-.alpha.,.alpha.-dimethylbenzyl isocyanate oligomer (I), prepd. by copolymn. of the monomers in the presence of AIBN, was dissolved in CH2Cl2 to form a 5 vol.% soln. The soln. was applied to bovine bone and dried. Then, a bisphenol A-glycidyl methacrylate liq. dild. with triethylene glycol dimethacrylate was applied to the bone and the cemented specimens were clamped together for 15 min, then stored in H2O for 24 h, after which the joint showed tensile strength 7.69 .+-. 1.12 MPa, compared with 1.08 .+-. 0.60 MPa for a control without I.

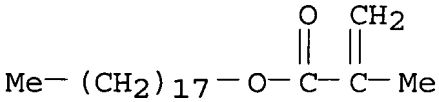
IT **120516-25-8P**
(oligomeric, prepn. of, as adhesives for medical and veterinary applications)

RN 120516-25-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-isocyanatoethyl ester, polymer with octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

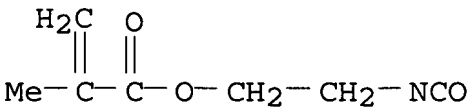
CM 1

CRN 32360-05-7
CMF C22 H42 O2



CM 2

CRN 30674-80-7
CMF C7 H9 N O3

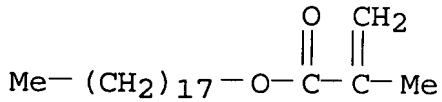


CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 35, 63
IT 95627-72-8P 95861-89-5P 95890-09-8P 96317-82-7P 119889-54-2P
119889-55-3P 119889-56-4P 119889-57-5P 119889-58-6P
119889-59-7P 119889-60-0P 119889-61-1P 119889-62-2P
119889-63-3P 119889-64-4P 119889-65-5P 119936-93-5P
119936-94-6P 119970-30-8P 119970-31-9P 119970-32-0P
119970-33-1P 119970-34-2P 120439-92-1P 120439-93-2P
120439-94-3P 120439-95-4P 120439-96-5P 120439-97-6P
120439-98-7P 120439-99-8P 120440-00-8P 120440-01-9P
120516-24-7P **120516-25-8P** 120516-26-9P 120516-27-0P
120534-28-3P 120534-29-4P 120534-30-7P 120534-31-8P
120534-33-0P 120534-34-1P 120534-35-2P 120534-36-3P
120534-37-4P 120534-38-5P 120534-39-6P 122529-66-2P
122529-67-3P
(oligomeric, prepn. of, as adhesives for medical and veterinary applications)

L36 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2003 ACS
1989:502662 Document No. 111:102662 Oligomers with pendant isocyanate groups as tissue adhesives: II. Adhesion to bone and other tissues. Brauer, G. M.; Lee, C. H. (Natl. Inst. Stand. Technol., Gaithersburg, MD, 20899, USA). Journal of Biomedical Materials Research, 23(7), 753-63 (English) 1989. CODEN: JBMRBG. ISSN: 0021-9304.
AB The adhesive properties of a series of oligomers prepd. from 2-isocyanatoethyl methacrylates (IEM) and/or m-isopropenyl-.alpha., .alpha.-dimethylbenzyl isocyanate (TMI) and various acrylates or methacrylates were studied. The bond strength of bone, dentin, or soft tissue specimens joined with these oligomers resp. to bone, dental composite restorative, or denture base resin were detd. by tensile adhesion or shear tests. These oligomers are more effective in forming stronger bonds to bone than are other tissue adhesives. Fracture occurs cohesively, usually within the bone. Thermocycling in water for 1 wk between 5.degree.C and 55.degree.C did not decrease adhesion, indicating that exposure to water or thermal shock produced no deterioration of the bond. Tensile adhesion of bovine or human dentin joined to composite restorative resin by means of the oligomers is similar to that of the best dental bonding agents such as Gluma (glutaraldehyde and 2-hydroxyethyl methacrylate) or ferric oxalate + N-phenylglycine + dimethylacryloxyethylpyromellitate. These oligomers also strongly bond soft tissues and calfskin and to acrylic resins and composites.
IT **120516-25-8P**
(prepn. and adhesive strength of, to bone and dentin and tissue)
RN 120516-25-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-isocyanatoethyl ester, polymer with octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

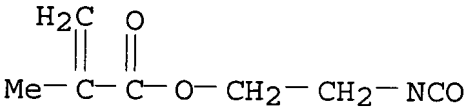
CM 1

CRN 32360-05-7
CMF C22 H42 O2



CM 2

CRN 30674-80-7
CMF C7 H9 N O3



CC 63-7 (Pharmaceuticals)
IT 95890-09-8P 119889-54-2P 119889-55-3P 119889-56-4P
119889-57-5P 119936-93-5P 119936-94-6P 119970-30-8P
119970-31-9P 119970-32-0P 119970-33-1P 119970-34-2P
120440-02-0P 120440-03-1P 120516-24-7P **120516-25-8P**
120516-26-9P 120516-27-0P 120534-35-2P 120534-36-3P
120534-37-4P 120534-38-5P 120534-39-6P
(prepn. and adhesive strength of, to bone and dentin and tissue)

L36 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2003 ACS
1989:199122 Document No. 110:199122 Oligomers with pendant isocyanate groups as tissue adhesives. I. Synthesis and characterization. Brauer, G. M.; Lee, C. H. (Dent. Med. Mater., Natl. Inst. Stand. Technol., Gaithersburg, MD, 20899, USA). Journal of Biomedical Materials Research, 23(3), 295-309 (English) 1989. CODEN: JBMRBG. ISSN: 0021-9304.

AB A series of methacrylate oligomers contg. pendant isocyanate groups were synthesized by reacting 2-isocyanatoethyl methacrylate (IEM) and/or m-isopropenyl-.alpha.,.alpha.-dimethylbenzyl isocyanate (TMI) in ethoxyethyl acetate with methacrylates ranging from methyl to stearyl methacrylate or allyl-, cyclohexyl-, glycidyl-, i-bornyl-, or dicyclopentenyloxyethyl methacrylate. The oligomers which are stable at room temp. were characterized by IR for NCO, ester, and C:C groups and by their refractive indexes. They have a small no. of residual double bonds and a mol. wt. low enough so that the compds. are liqs. at room temp. and dissolve readily in esters and chlorinated hydrocarbons. HPLC showed no residual monomer. GPC and intrinsic viscosity of selected oligomers indicated a mol. wt. range from 1400 to 2600. Isocyanate groups were detd. titrimetrically and ranged from 15.9 to 5.1%. Concurrent studies demonstrated that

these oligomers bond strongly to hard and soft tissues. Thus, subject to their biocompatibility they could find many applications as tissue adhesives.

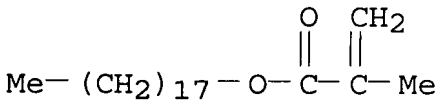
IT **120516-25-8P**
(prepn. and characterization of, for tissue adhesive)

RN 120516-25-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-isocyanatoethyl ester, polymer with octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

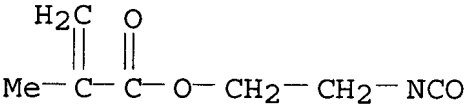
CM 1

CRN 32360-05-7
CMF C22 H42 O2



CM 2

CRN 30674-80-7
CMF C7 H9 N O3



CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 35

IT 95861-89-5P 95890-09-8P 119889-54-2P 119889-55-3P
119889-56-4P 119889-57-5P 119936-93-5P 119936-94-6P
119970-30-8P 119970-31-9P 119970-32-0P 119970-33-1P
119970-34-2P 120440-02-0P 120440-03-1P 120516-24-7P
120516-25-8P 120516-26-9P 120516-27-0P 120534-28-3P
120534-29-4P 120534-30-7P 120534-31-8P 120534-32-9P
120534-33-0P 120534-34-1P 120534-35-2P 120534-36-3P
120534-37-4P 120534-38-5P 120534-39-6P
(prepn. and characterization of, for tissue adhesive)